

DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY INFANTRY CENTER and FORT BENNING
FORT BENNING, GEORGIA 31905-5000

USAIC Regulation
No. 210-4

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Installations
RANGE AND TERRAIN REGULATION

History. This publishing is a revision of the regulation.

Summary. This regulation provides procedures for the management of range and training assets. This revision changes references to the Directorate of Facilities Engineering & Logistics (DFEL) to the respective functions of Directorate of Public Works (DPW) and Directorate of Logistics (DOL), updates the Flight Operations and corrects telephone numbers, dates and other administrative changes since the last publication.

Applicability. This regulation applies to all units and activities conducting training and testing on Fort Benning, Georgia.

Supplementation. Supplementation of this regulation is prohibited without prior approval from the Commander, United States Army Infantry Center (USAIC), ATTN: IMSE-BEN-PLT, Fort Benning, Georgia 31905-3006.

Suggested improvements. The proponent of this regulation is the Director of Plans, Training, and Mobilization (DPTM). Send comments and suggested improvements on DA Form 2028 through channels to the DPTM, (IMSE-BEN-PL), Fort Benning, Georgia 31905-3006.

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Chapter 1 Introduction

1-1. Purpose.

This regulation provides guidance, standards, procedures, and requirements for the management of ranges and training areas and airspace at the United States Army Infantry Center (USAIC), Fort Benning, Georgia.

1-2. References. Appendix A contains required and related publications and prescribed and referenced forms.

1-3. Explanation of abbreviations and terms. Abbreviations and terms used in this regulation are explained in the glossary.

Chapter 2 Responsibilities

2-1. Director of Plans, Training, and Mobilization (DPTM). The DPTM will:

- Publish range and terrain regulations and directives for safe and efficient use of ranges, training facilities/areas and airspace.
- Manage the use of ranges, training areas, and airspace.
- Assure range safety procedures are established and enforced consistent with AR 385-63, Policies and Procedures for Firing Ammunition for Training, Target Practice, and Combat.
- Conduct a quality assurance program as shown in chapter 5.

2-2. Director of Public Works (DPW). The DPW will:

- Manage the construction, modification, and/or maintenance of facilities and environmental management.
- Provide environmental review of training exercises using the Record of Environmental Considerations form, FB Form 144-R, (natural resources, endangered species, archeological and/or historical sites, pollution prevention control issues, etc).
- Process unit submitted DA Form 4283 in accordance with USAIC Regulation 420-8, Construction Maintenance and Repair of Real Property, and approve or disapprove construction, modification and/or maintenance of exercise facilities.
- Supervise forest fire prevention, fire suppression operations, and conduct fire prevention measures and inspections of property to ensure adequate measures are maintained.

2-3. Director of Logistics (DOL). The DOL will maintain, above organizational level, range targetry and public address systems.

2-4. Fort Benning Safety. Fort Benning Safety will:

- Monitor the effectiveness of enforcement of the range safety requirements and provide assistance to units for compliance.
- Review range safety waivers and requests to maneuver through temporary impact areas and provide comments.
- Provide safety assistance to units/activities preparing training or firing exercises.
- Review and provide guidance for the preparation of Risk Management Worksheets (FB Form 46-R).

2-5. Range Management Officer (RMO). The RMO serves as the primary agency for development and enforcement of range and terrain policies of the installation. The RMO will:

- Establish standard terminology for range operation.
- Prescribe the procedures by which a unit establishes a training exercise.
- Prescribe the procedures by which a unit schedules a range, training area or training site.
- Prescribe responsibilities and procedures related to the safe conduct of training on ranges, training facilities and training areas.
- Prescribe procedures for acquiring range supplies, target systems and maintenance support.
- Provide a list of ranges and training facilities at Fort Benning, and the primary type of activity for which a range or facility is designed and its location.
- Provide tactical and technical assistance in the development of exercises.
- Provide range survey actions for computation of weapons surface danger zones (SDZ) and firing limits.
- Serve as a focal point for coordination to authenticate unit live fire exercises.

j. Develop and publish live fire data, FB Form 210-4-3-R, Firing/Nonfiring Data, for standard and non-standard ranges (small arms/BFV and Tank). A reproducible copy of FB Form 210-4-3-R is provided at the back of this publication and may be reproduced on office copiers on an "as needed" basis.

k. Coordinate the assignment of ranges/facilities to installation units.

l. Brief newly assigned commanders and operations officers (S3 of battalions and above), 29th Infantry Regiment Company Commanders and USAIC division chiefs involved with training support, on the policies and requirements of this regulation.

m. Conduct a range safety briefing for all officers, civilians, and noncommissioned officers responsible for performing duties as Officer in Charge (OIC) or Range Safety Officer (RSO). The scope of the briefing is standard regulatory duties of OIC/RSOs. The briefing will normally be scheduled twice a month on Tuesday at 0900 and at an announced location. An identification card FB (RCO) Form 3 will be issued to those individuals who successfully attend this briefing. The card becomes an integral step in the process of appointment to OIC/RSO duties by using units and must be revalidated every two years by attendance at another briefing.

n. Provide a class to attendees of the Company Commander/First Sergeant Orientation Course covering responsibilities of units in compliance with requirements herein.

o. Provide using units information on the capabilities and operation of each range to include: type training supported, firing points, number and type of targets, expected throughput, road closures, and so forth.

p. Assist users in identifying and coordinating target systems support and battlefield simulation support. Support is rendered in accordance with training resource priorities.

q. Provide range safety checklists for use by OICs and RSOs.

r. Monitor and assist in prioritizing maintenance support by DOL.

s. Coordinate clearance and destruction of unexploded ordnance.

t. Operate a 24-hour control center for controlling range activities and provide range advisories to aircraft utilizing R3002 Special Use Airspace when requested.

u. Provide target systems and battlefield simulation support, in accordance with chapter 5, paragraph 5-25.

v. Maintain a supply of standard targets for issue to units assigned ranges.

2-6. Fort Benning Air Traffic and Airspace (AT&A) Officer. The Fort Benning AT&A Officer is the command point of contact for all matters within the scope of AR 95-2, Aviation Air Traffic Control, Airfields, Flight Activities, and Navigational Aids, that is applicable to the AT&A officer's area of responsibility.

2-7. Commanders of units or training activities assigned ranges or training facilities listed in table 2-1 (Ranges and Training Areas) will:

- Orient all using units on the capabilities, limitations, operational aspects, safety limits and considerations of their assigned range or training facility.
- Check all using units on and off their assigned range or training facility.
- Maintain assigned ranges and facilities for overall efficient use by other users. (See Appendix B, Range Sponsorship Program)

2-8. Officer in Charge (OIC). The OIC will ensure that all cadre operating a range have been certified by the Battalion Commander in accordance with DA Pamphlet 385-63, chapter 1, paragraph 1-6. For artillery units, the commander provides the Installation RMO a list of personnel who have successfully completed the unit certification program. The OIC will be responsible for the overall safe conduct of training, proper use of facilities, and will perform the following duties:

a. Prior to firing/training ensure that:

(1) The range/area is properly scheduled and the scheduling document is on site. This is accomplished by scheduling through the Range Facility Management Support System (RFMSS).

(2) A range book is prepared, to insure the presence of documentation required by Table 2-3, Range Book Requirements, and is present for all range firing and live fire /non firing exercises. The book will contain all required documents to run the range, and is maintained by the unit to which the range is assigned. A training unit need not duplicate any item in the range book except for an approved RFMSS Request Summary to document proper scheduling of the land and a Daily Risk Management Worksheet. Assigned units must maintain all items in range book in current, usable status.

(3) All personnel instructing the use of explosives or exercising immediate close supervision in the use of explosives are graduates of the

United States Army Infantry School (USAIS) Demolition Permit Course and possess a valid Demolition Permit Card (FB (USAIS) Form 132).

(4) Roadblocks, road guards (capable of communicating with the OIC)) and barriers are in place. Road guards will have vests and traffic signaling devices. Permanently installed signs, "Road Block Ahead", listed on the FB Form 210-4-3-R, Firing/Nonfiring Data, are displayed as required.

(5) Required communication is established and clearance, in the form of an opening code, has been obtained to fire.

(6) All personnel have received safety briefings regarding troop limits, range procedures, and that a ready reference for MEDEVAC procedures is prominently posted on the range.

(7) Only authorized ammunition is present for use on the range.

(8) The red range flag/lights are displayed.

(9) A knowledgeable Range Safety Officer has been duly appointed (see table 2-5). The Safety Officer will be assigned no other duties.

(10) Medical support is on site, if required for the activity scheduled (see chapter 8).

(11) First aid kit, appropriate to the level of medical coverage required, is present on the range.

(12) Two each 10:BC or larger fire extinguishers are present at the ammunition point.

(13) Appropriate ammunition accountability documentation is on site and all personnel instructed on procedures of the amnesty program in accordance with DA Pamphlet 710-2-1 and USAIC Regulation 710-3.

b. During firing/training, ensure that:

(1) The provisions of Appendix D, Lost Soldier Procedures, are initiated upon discovery of a missing Soldier.

(2) Personnel do not move to or leave from the firing line without permission of the OIC or RSO.

(3) Communication is maintained with Range Control in accordance with chapter 7.

(4) All firing is controlled in accordance with the FB Form 210-4-3-R, Firing/Nonfiring Data. FB Form 210-4-3-R will be submitted in one copy to Range Operations. A reproducible copy of FB Form 210-4-3-R is provided at the back of this publication and may be reproduced on office copiers on an "as needed" basis.

(5) Misfires are removed only on command of the OIC in accordance with procedures prescribed for the weapon.

(6) Combat helmets are worn when engaged in: demolitions/explosives training, hand/rifle grenade training, firing with mortars and infiltration courses.

(7) Special emphasis is taken to comply with requirements for approved overhead fire exercises in accordance with instructions indicated on FB Form 210-4-3-R.

(8) Weapons are cleared and checked during temporary suspension of firing.

(9) All personnel wear hearing protection devices in accordance with USAIC Regulation 40-6, Occupational Health Program.

(10) Nothing is removed from firing lines without permission of the OIC/RSO.

(11) The impact area is monitored at all times to ensure it remains clear.

c. After firing/training, ensure that:

(1) All weapons are cleared.

(2) Duds are reported to Range Control.

(3) All unexploded charges, booby trap material, simulators, and pyrotechnics are removed or detonated.

(4) All unused propellant increments are disposed of in accordance with appropriate field manuals.

(5) Roadblocks, guards have been removed/recalled.

(6) Foxholes, trenches, gun emplacements, temporary latrines and sumps have been filled with earth.

(7) All barbed/razor wire has been removed. Barbed/razor wire may be turned in to the Defense Reutilization and Marketing Office (DRMO) provided it is banded to a pallet so as not to hang over the sides and extend higher than 48 inches or is secured in a container in a manner which will prevent damage to the handler.

(8) Grenade impact areas have been leveled and graded.

(9) Unexploded ammunition is checked prior to return to the Ammunition Supply Point (ASP).

(10) Adequate plastic bags are available on site to police range/training areas and facilities upon completion of training. Trash and litter will be separated from recyclables (cardboard, office type paper, cans, bottles and plastic jugs). Recyclables will be separated and delivered to the Materiel Recovery Facility, building 4000, Old Cusseta Road. Trash and litter may also be deposited at this location in the large containers available. Hours of operation are 0800-1630, Monday through Friday.

(11) TOW and Dragon wire is removed up to the edge of the impact area. Wire may be turned in to DRMO if rolled on a reel, stick or in a container.

(12) The range/area has been policed of all trash/debris and the trash/debris has been removed from the range.

(13) Closing code is obtained from Range Control and clearance by the unit responsible for the range is made, as appropriate.

(14) Report any residual discrepancies on the facility to the assigned unit (unit responsible for the range) and to Range Control, DPTM.

Table 2-1. Ranges and training areas.

RANGE	ASSIGNED TO	# FIRING PTS	LOCATION
ANTIARMOR/TOW/DRAGON/JAVELIN			
APPARI	29th IN	10 nonfiring	012825
Galloway (Tracking)	29th IN	5 nonfiring	013776
Duke (LAW Sub Cal)	29th IN	12	990827
Lee (Tracking)	29th IN	10 (TOW/Dragon)	075897
Molnar	29th IN	Javelin Tracking	952735
Coolidge	29th IN	1 (TOW/Dragon)	009784
ARTILLERY OBSERVATION POINTS			
Ferguson OP	11th IN	NA	156902
Hartell OP (Bunkers)	11th IN	NA	145907
BRADLEY FIGHTING VEHICLE (BFV) AND TANK			
Carmouche (Vehicle Tm Cbt EX)	3/3 ID	4/1 Lane	106951
Ruth (Gunner Training)	3/3 ID	1 Lane	115010
Hastings (Plt Battle Course)	3/3 ID	4/4 Lanes	209971
Cactus-Whitson (BFV Table XII Dismount)	3/3 ID	2 Lanes	190887
COMBAT PISTOL RANGE			
Porter	29th IN	15	997824
COMPETITIVE MARKSMANSHIP			
Brinson	USAMU	9 Bays	015813
Easley	USAMU	26	922813
Hibbs	USAMU	2	926809
Pool Range Complex	USAMU	45 50m, 50 300m, 20 Small Bore, 80 Air Rifle	933808
Parks	USAMU	1	930810
Phillips	USAMU	60	927809
Hook	USAMU	5 Fields	932809

Table 2-1. Ranges and training areas (Continued)

DEMO AND MINE			
Brown Demolition (Inactive)	DPTM	Inactive	030864
Mine TA	29 th IN	NA	995886
Terry Demolition	11 th IN	NA	107938
GRENADE			
Malone 1	29 th IN	4	011894
Dianda--Hand Grenade	WHINSEC	Inactive	969826
GRENADE LAUNCHER			
Malone 21 (M203)	29 th IN	16	022937
Warner (M203)	11 th IN	16	029769
GRENADE MACHINE GUN			
Ruth	3/3 ID	4 Lanes	115010
INFILTRATION COURSE			
Young	29 th IN	4	028937
MACHINE GUN/SAW			
Malone 12-- (Transition, (Zero)	29 th IN	10	057899
Wagner (MPMG)	11 th IN	9	938811
Ruth (.50 Cal Qual)	3/3 ID	2	115010
Malone 5 (MPMG)	29 th IN	10	033899
MORTAR			
Malone 24 (Sub Cal)	29 th IN	4	011905
Malone 25	29 th IN	4	008923
Shelton (SRTR)	29 th IN	1	918805
MOUT ASSAULT COURSE (MAC)			
Buchanan	WHINSEC	6	012798
MULTIPURPOSE RANGES			
K-22	3/75TH Ranger's	SQD- Company Live Fire	170902
Cactus-Whitson	3/3 ID	2	190889
Coolidge	29 th IN	3	016785
Red Cloud	29 th IN	1	949818
Ferguson	11 th IN	1	156902
RANGER LIVE FIRE			
Brann CQBC	75 th Rgr	5	027759
RECREATIONAL			
English	RP Club	35	913804
DAY/NIGHT FIRE			
Malone 14, (Day /Night Field Fire)	29 th IN	20	061902
KD FIRE			
McAndrews (KD)	29 th IN	70	921811
Maertens (KD)	29 th IN	10	001829
RIFLE MARKSMANSHIP (10-25 METERS)			
Malone 17	29 th IN	110	063913
Roosevelt	36 th GP	74	911803
Malone 9	29 th IN	110	046894
Coursen West	11 th IN	50	943813
Malone 11	29 th IN	110	056896

Table 2-1. Ranges and training areas (Continued)

AUTOMATED RIFLE MARKSMANSHIP			
Malone 2 (Automated Field Fire)	29 th IN	32	020897
Malone 7 (Automated Record Fire)	29 th IN	16	044894
Malone 15 (Modified Field Fire)	29 th IN	9	062903
Malone 16 (Auto- mated Record Fire)	29 th IN	16	063909
Malone 18 (Defense Test Range)	29 th IN	9	063921
Malone 14 MARF	29 th IN	20	061902
Simpson (Automated Record Fire)	36 th GP	11	916807
RIFLE MARKSMANSHIP (RECORD) (NON-AUTOMATED)			
Martin (Inactive)	DPTM	16	009818
Maertens (KD)	29 th IN	10	001829
SAW/MACHINE GUN 10 METER			
Coursen West	11 th IN	50	943813
Malone 12	29 th IN	10	057899
Malone 4	29 th IN	72	033898
SMALL ARMS FAMILIARIZATION			
Farnsworth	75 th Rgr	3	908800
Griswold	SBL	5	976737
Patton	BCTB	2 firing lines	976819
SNIPER			
Burroughs	29 th IN	7	007781
TACTICAL FIRING PROBLEMS			
Malone 3	ITB	Buddy Tm	033897
K-22	75 th Rgr	Off/DEF	171903
Malone 22	ITB	Attack	015934
Garnsey Complex	11 th IN	Attack	025742
Pierce	ITB	Close Combat	966824
Malone 26	29 th IN	Defense	038935
Cactus-Whitson	3/3 ID	CALFEX	190889
Red Cloud (CAPEX)	29 th IN	CAPEX	944817
Ware	11 th IN	Defense	093979
TEST/EVALUATION			
Buckner	SBL	N/A	954823
AIRSTRIPS (See USAIC/FB Aviation SOP at Aviation Div, DOT)			
AO Brown	29 th IN	Qual Test Site	020842
AO Gold	29 th IN	Qual Test Site	022983
AO Green	29 th IN	Squad Tact Tng	023956
AO Yellow	29 th IN	Qual Test Site	024948
AO Young	ITB	Infiltration course	028939
Aparri Rng	29 th IN	Dragon Track- ing	013825
Suitor Hill	29 th IN	Driver Tng	038835
Britten TA	11 th IN	NBC	064935
Camp Darby	RTB	Ranger Tng	031774
Cole TA	75 th Rgr	Patrolling	031774

Table 2-1. Ranges and training areas (Continued)

Arkman	11th IN	Airborne Drop Zone	B04 Area
Bradley Landing	N/A	River Crossing	877788
Cole Range	3/75th Rgr	Ranger Training	033775
Daniel Pond	3/75th Rgr	Ranger Training	140815
Dekkar Strip	36th ENG	Inactive	096735
Dixie Village	CATD	Leadership Reaction (LRC)	907781
Drug Lab	3/75th Rgr	Ranger/DHD Training	
Engineer Landing	36th Gp	River Crossing	882807
Fort Mitchell LN site	WHINHSC	Land Nav	V Areas
Fryar Field	11th IN	Airborne Drop Zone	X03 Area
Fuhrman Field	29th IN	Land Nav	029788
Goodblood	29 th IN	Defense Site	045939
Heliports	(See USAIC/FB Aviation SOP, (available at Aviation Div, DPTM))		
Killborne	11 th REG	Commo Training	020862
Land Mine TA	29th IN	Mine Warfare	995887
Leyte HP	36th Gp	Helicopter LZ	056835
Malone 8	BCTB	Range Procedures	052885
McBride Bridge	29th IN	Squad Tact Tng	049884
Mobley Strip	11th IN	Tactical Tng	191999
Mortar TA	29th IN	Mortar Mech	Area U4
MOUT (McKenna)	SBL	MOUT Tng	068836
MOUT (Malone)	29th IN	MOUT Tng	028891
Patrolling TA	29th IN	Patrol Tchngs	999090
Todd Field	RTB	Ranger Tng	030801
U-1 TA	29th IN	Reinforcem Tng	993907
Victory Pond	RTB	Ranger Tng	039831
W2	WHINSC	Patrolling	898768
Wendy Field	NCOA	Tactical Tng	113845
Yankee Rd LN	29th IN	Land Nav	QAreas

Table 2-2. BIVOUAC SITES/ Number

BIVOUAC SITES Site Number	Location	Assign-ed	Co Size	Facilities
Malone 4A	035886	ITB	1	1 Latrine
Malone 4B	035886	ITB	1	1 Latrine 1 A Frame Shower
Malone 4C	035886	ITB	1	1 Latrine
Malone 14 (A, B, C)	066900	ITB	2	4 Latrines, 2 A Frame Shower
MOUT (TA)	025885	ITB	2	3 Latrines, 1 A Frame Shower

Table 2-2. BIVOUAC SITES/ Number (continued)

BIVOUAC SITES Site Number	Location	Assign-ed	Co Size	Facilities
AO Blue (AB)	051940	ITB	2	1 Latrine
AO Yellow (AB)	023947	ITB	2	2 Latrine
Malone 22 (AB)	011937	ITB	2	2 Latrines
AO Green	026946	ITB	2	2 Latrines
AO Gold (AB)	026946	ITB	2	2 Latrines
Malone 24 (AB)	012904	ITB	2	2 Latrines
TIS Camp (A, B, C)	064893	ITB	3	4 Latrines, 1 A Frame Shower
Malone 16 (AB)	065907	ITB	2	2 Latrines, 1 A Frame, Shower

Table 2-3. Range book requirements

1. FB Form 210-4-3-R, Firing/Nonfiring Data
2. Request Summary, Requests to Schedule Ranges or Terrain
3. Risk Management Worksheets, FB Form 46-R
4. USAIC Regulation 210-4
5. MEDEVAC procedure
6. Current FM's and TM's for every weapon system being fired
7. FB Form 210-4-1-R, Range Safety Checklist
8. Artillery and Mortar Safety Record, FB Form 210-4-2-R
9. Prescribed SOP for the particular range
Note: FB Form 210-4-3-R for small arms ranges may be obtained from Range Control, DPTM. A reproducible copy of FB Form 210-4-3-R is provided at the back of this publication and may be reproduced on office copiers on an "as needed" basis.

Table 2-4. Emergency telephone numbers

EMERGENCY	911
Aerial Crash Notification	545-3524
Aerial Evacuation	911
Ambulance	544-3911
Fire	911
Forest Fires Directorate of Public Works Land Management Branch	544-6120/6206
AVIATION	
Flight Safety	545-2425
LAAF Operations	545-3524
Weather	545-5281
RANGE CONTROL:	
Headquarters	545-3446/4619/1543
Operations Branch	545-1602/2152
Radio Control	545-3474/3479
Hazard Spill Response Unit (thru USAIC SDO)	545-2218/3214
NOTE: Installation MPA radios possess E 911 capability.	

Table 2-4. Emergency telephone numbers (continued)

INCIDENTS INVOLVING WEAPONS OR AMMUNITION:	
DURING NORMAL DUTY HOURS:	
QUALITY ASSURANCE CCEP	544-2801/1759/1307
Post QASAS/Ammunition Inspector, DOL	544-7490/6015/7345
Range Control Radio Control	545-3474 /3479
Safety Manager, DPS	545-3267/7900
AFTER NORMAL DUTY HOURS:	
USAIC FOD/SDO	545-2218 /3214
DOL Duty Officer	545-4516/4503
Range Control, DPTM	545-3474/3479
DPS Safety Mgr (thru USAIC SDO)	545-2218/3214
Environmental Mgt Div (thru USAIC SDO)	545-2218/3214
Hazard Spill Response Unit (thru USAIC SDO)	545-2218/3214
NOTE: Installation MPA radios possess E 911 capability.	

Table 2-5. Officer in Charge & Range Safety Officer Requirements

REQUIREMENTS (see note 4)		
Personnel serving as OIC/RSO IAW DA Pamphlet 385-63 must:		
Have satisfactorily completed a standard program of instruction in the duties of OIC/RSO developed by the battalion to which they are assigned and have attended a range safety briefing conducted by Range Control, DPTM.		
Be knowledgeable in the weapons systems involved and the duties required.		
RDD- Daily Risk Assessment completed.		
OIC and RSO have safety cards.		
Demo card if required.		
WEAPON SYSTEM	OIC	RSO
Practice hand grenade or rifle grenades; sub caliber training devices, LASER ranges; firing devices; simulators, trip flares; small arms and machine guns.	SSG	SSG
Chemical agents and smoke (See note 1)	SSG	NON E
Aerial gunnery, air defense weapons; flame-throwers, live grenades (hand and rifle); mines and demolitions; mortar; recoilless weapons; rockets, guided missiles; tank and BFV cannon.	SFC	SSG
Artillery (See Note 2)	SFC	SSG
Live fire exercises using organic weapons, squad through company, battery, and troop.	SFC	SSG
Combined arms live fire exercises using outside fire support: Section, platoon, squad, company, battery, troop, battalion, squadron or larger (See Note 3)	SFC	SSG
NOTES:		
1. When nuclear, biological, chemical (NBC) training is being conducted, OIC must be NBC qualified. If an RSO is used, he or she must also be NBC qualified.		
2. Duties of safety officer are normally performed by the battery executive officer.		

3. OIC will be a field grade officer for battalion and larger size units. The RSO on combined arms live fire exercises (CALFEX) will be of the ranks listed above based on the complexity of the exercise and number of participants (i.e., squad, section, platoon, company, troop, squadron, battalion, and larger).

4. Ranks of other services, DA Civilians and Contractors must be equivalent to U.S. Army ranks.

2-9. Officers in Charge of Serious Range Incidents. OIC and safety officers involved in serious range incidents may lose their certification if determined to be in violation of AR 385-62, DA Pamphlet 385-63, and/or this regulation, or while an incident is under investigation their certification may be suspended. Incidents that endanger or cause injury to personnel or destroy government property may cause loss of certification for a period of from 1 to 12 months. Involvement in another such incident may cause permanent loss of certification.

2-10. Range Safety Officer (RSO). The RSO will--

- Perform no duties other than those of Safety Officer.
- Determine that weapons are properly positioned, that only authorized ammunition is used, and that firing settings are within prescribed limits.
- Assure that the surface danger zone is clear of personnel.
- Order an immediate cease-fire when any unsafe condition is observed.
- Record all duds and their approximate location.
- Verify all weapons are clear to the OIC upon completion of training.
- Duties may best be performed by actually controlling the exercise
- Close roadblocks, post road guards (capable of communicating with the OIC) and Barriers.

2-11. LASER Range Safety Officer (LRSO). The LRSO will:

- Develop the SOP for LASER operations instructing personnel involved in LASER operations to provide an understanding of protective equipment to be used.
- Remove, cover, or paint all specular surfaces within the distances prescribed by DA Pamphlet 385-63 and other current directives for particular devices.
- Ensure compliance with pertinent publications applicable to the particular LASER device to be used.
- Display laser warning signs.

2-12. Commanders of using units. Commanders of units using ranges and training areas will:

- Ensure that the designated OIC/RSO have attended a range safety briefing conducted by Range Control, DPTM, prior to assuming duties.
- Ensure that all personnel are complying with prescribed operational procedures (paragraphs 2-6 through 2-8, of this regulation) and safety requirements.
- Ensure that the provisions of Appendix D, Lost Soldier Procedures, are initiated upon discovery of a missing Soldier.

Chapter 3

Establishing Training Exercises (Problems)

3-1. General. The requirements herein are to accommodate live and nonlive fire training exercises. Coordinating actions are designed to afford units a one-stop service where possible. Identification of terrain requirements will be via training area compartments and specific cantonment area sites shown on the Fort Benning Installation 1:50,000 Map. It is essential that actions be completed timely in order to ensure adequate reaction time for support agencies. Approved exercises are valid for a 2-year period.

3-2. Exercise guidance/action planning sequence. The actions and timelines prescribed below are based on training exercises to accommodate up to company-team maneuver units with normal support elements, to include Air Force Close Air Support (CAS). Depending on the complexity of the exercise, those actions determined not relevant by Range Control may be omitted.

- D-25 weeks. The unit point of contact briefs Range Control on the general concept of operation to include the type of exercise, training objective, desired maneuver area(s), weapons to be employed, target requirements, and any required construction/preparation, and any field storage or holding of ammunition requiring the establishment of a Field

Ammunition Supply Point (Field ASP). Coordinate training exercises involving aircraft and airspace with the Fort Benning AT&A Officer in conjunction with Range Control general concept of operation briefing. The concept must be in sufficient detail to identify probable terrain and airspace requirements. Range Control will provide recommendations on general areas to consider for the type exercise proposed and instructions for submitting documentation for scheduling and environmental consideration clearance.

b. D-25 to D-23 weeks.

(1) Range Control, along with point of contact and DPW, Conservation Branch will conduct a ground reconnaissance of selected area for the training exercise.

(2) Range Control will develop probable total land requirements to encompass the maneuver area and composite surface danger zone (SDZ).

(3) Unit will submit copy of FB Form 210-4-3-R with scenario to Range Control, DPTM, for total land requirements.

(4) The unit will submit a FB Form 144-R Record of Environmental Consideration to DPW as prescribed in Army Regulation 200-2, Environmental Effects of Army Actions. Submission of FB Form 144-R is required for any action on Fort Benning, to include training. The FB Form 144-R must describe the proposed action in sufficient detail to allow for a comprehensive analysis of the potential impact on the environment. Examples of information required on the FB Form 144-R are: Foxhole and hasty fighting position construction, preparation of tank obstacles, trenching, grading, and so forth.

(5) DPW will evaluate the proposed activity described in the FB Form 144-R to determine and initiate coordinating measures for land use. Impact on natural resources, historical sites, and archeological areas will be considered and the completed FB Form 144-R provided to the unit point of contact and Range Control within 30 working days.

c. D-22 to D-19 weeks:

(1) Live Fire Exercises (LFX). Units will submit FB Form 210-4-3-R for live fire exercises to include non-standard training on small arms ranges signed by Battalion Commander or Operations Officer (S3) to Range Control for approval. Point of contact, telephone number, and the following enclosures must be included:

(a) Scenario (format) to include: Purpose of exercise; training tasks and objectives; range/terrain requirements (training area compartments determined at initial terrain search); weapons, ammunition, pyrotechnics, and so forth, by type; tactical plan of maneuver and integration of supporting fire; execution (the written step by step unfolding of the live fire exercise play describing the who, what, when, how, and why of all aspects from the initiation to culmination); a recovery (clean up) plan addressing those items in paragraph 5-15 of this regulation for all ranges, training areas and facilities to be used; safety control measures.

(b) Risk management (see paragraph 5-26.)

(c) FB Form 210-4-2-R, Artillery/Mortar Safety Record, (prepared by units firing artillery/mortars and submitted to Range Control for approval). A reproducible copy of FB Form 210-4-2-R is provided at the back of this publication and may be reproduced on office copiers on an "as needed basis".

(d) Schematic of exercise area illustrating the major features of the exercise; control points, phase lines, firing points, target locations and maneuver directions portrayed to the degree that any person may readily grasp the location and execution of the exercise.

(e) Type of aircraft and operation plan to include arming point, flight routes (entire corridor), start/cease fire lines, communications and control plan (if applicable).

(f) Plan for search, marking and disposal of duds (if applicable).

(g) FB Form 144-R.

(h) Describe control measures of the target area to prohibit entry of unauthorized personnel.

(i) Submit proposed site plan of Field ASP and listing of ammunition to be stored to the DOL Quality Assurance Specialist, Bldg 6 for review.

(2) Nonfiring exercises: Training activities conducting recurring exercises for U.S. Army Infantry School or Western Hemisphere Institute for Security Cooperation approved Program of Instruction training will submit FB Form 210-4-3-R signed by Commander or Operations Officer (S3) to Range Control for approval. The form will include: Purpose of exercise; terrain requirements; requirements for blank ammunition and pyrotechnics, and so forth, by type; the tactical plan of maneuver; control measures; type of aircraft and flight routes (entire corridor) LZ/DZ surveys and FB 144-R, Record of Environmental Consideration; and a recovery (clean up) plan addressing those items in paragraph 5-15 of this regulation for all ranges, training areas and facilities to be used.

d. D-13 week.

(1) Scheduling requirements will be coordinated at the weekly range/terrain coordination meeting. Coordination will be effected with all attending units and will include airspace requirements.

(2) Range Control will assist units in determining surface danger zones for each specific firing event.

(3) Unit point of contact will submit work request DA Form 4283, Facility Engineering Work Request through Range Control to DPW for approval and/or assistance in construction.

(4) Range Control advises unit point of contact of waiver requirements and/or need for requests to maneuver through temporary impact areas and provide unit point of contact the format required.

(5) The unit point of contact will submit target systems support requirements to Range Control, DPTM.

e. D-5 week to D-Day. Confirm exercise site is properly scheduled at weekly range and terrain coordination meeting and applicable air missions are included in the Fort Benning Air Letter. Coordinate Field ASP site visit with DFEL QASAS, 545-7490/6015.

f. D-1 day. Make final coordination for support equipment (flags, roadblocks, keys, signs, radio, etc).

g. D Day. Establish final exercise control: Communication, road guards/blocks, and so forth. For major live fire exercises, such as those using Close Air Support or Company level Air Assaults, ensure a representative is on site at Range Control radio control center, building 2903, to monitor and assist in controlling the exercise. Representative must be completely knowledgeable of the exercise and of the implemented control measures.

Chapter 4

Scheduling of Ranges and Training Areas

4-1. General. The use of ranges, training facilities, training areas, (to include cantonment area drop zones), and associated airspace on the Fort Benning military reservation for any purpose requires the approval of Range Control, DPTM. All requests to schedule ranges, training facilities, training areas, target systems support, and appropriate air space will be consolidated at major units and submitted to Range Control using the Range Facility Management Support System (RFMSS).

4-2. Scheduling priorities. Power projection Platform missions, such as the CONUS Replacement Center requirements, have preemptive scheduling priority over all other activities. Units or activities executing these missions should attempt to share only that portion of the range or training facility, scheduled for use by another unit or activity, absolutely necessary to accomplish required training, where sharing is possible. To facilitate allocation of all training support resources, priorities for scheduling range/terrain facilities are established as shown below. These priorities are valid until 13 weeks prior to the event in the scheduling process. After that time, no priorities exist:

a. U.S. Army Infantry School Program of Instruction training (Includes BCTB and ITB)

b. Western Hemisphere Institute for Security Cooperation.

c. 75th Ranger Regiment.

d. All other units: FORSCOM, USAIC tenant and nontenant units.

e. Externally evaluated Battalion ARTEPs and Annual Tank Gunnery (one period per year) have preemptive scheduling priority if these events are clearly stated in the unit's annual training plan and previously coordinated with activities listed above.

f. For scheduling of McKenna MOUT Site, 3rd Battalion 75th Ranger Regiment will have the highest priority provided these events are clearly stated in the unit's Long Range Training Calendar, fully coordinated with SBL and scheduled 13 weeks prior to the date of the event through Range Control, DPTM.

4-3. Scheduling procedures. The following procedures are applicable for scheduling of all types of training areas on the reservation outside the cantonment areas:

a. Scheduling request:

(1) Major units will finalize requirements for ranges, target systems support, terrain, airspace, and selected training facilities for a 1-week period, 13 weeks in the future. Requests will be forwarded to Range Control using RFMSS. To insure priorities are clearly posted, USAIS requirements must be at Range Operations by Thursday each week for the 13 week lock in subsequent to the week being coordinated. All requirements from major units will be scheduled (frozen) at thirteen (13) weeks.

(2) All visiting units, and activities, active Army, other services, Reserve Components and allied nations will schedule ranges, training facilities and areas through, Plans and Mobilization Division, DPTM.

(3) U.S. Army Marksmanship Unit Competitive Ranges are Permanently scheduled unless cancelled by USAMU.

b. Weekly range/terrain coordination meeting: A meeting will be held each Thursday at 1330, building 2903, Range Control, DPTM, for the purpose of coordinating and scheduling the use of ranges and training areas. Requirements identified and coordinated 13 weeks out are locked in at that point. Support requirements are also identified/coordinated at the meeting. Commanders planning any type of training activity on Fort Benning ranges or training areas will ensure that a qualified representative, authorized to speak for the commander, is present to effect the coordination. Failure to attend will constitute justification for no action to be taken on a commander's request for a range or training area.

c. Target systems support: Requests to schedule target systems support will be noted in RFMSS. Due to limited target systems resources, it is imperative that realistic firing time requirements be scheduled. Final coordination by unit POC is required with Target Systems Branch two weeks prior to requested dates in order to ensure adequacy of support. Chapter 5 prescribes implementing instructions for use of target systems equipment.

d. DZ Surveys: Initial requests to use installation DZs that have not been previously surveyed must be accompanied by an approved DZ survey. These may be sent by electronic mail to Range Operations Officer.

e. Cancellations: Major unit S3s will promptly notify Range Control of cancellation of scheduled facilities/terrain. In order that such facilities/terrain may be available to other users, every effort should be made to effect cancellations at least 14 days in advance.

(1) All cancellations will be made using RFMSS.

(2) Automatic cancellation: If a facility requiring target systems support is not occupied within two hours of the scheduled firing time, it will be automatically cancelled.

4-4. Other scheduling considerations.

a. Units assigned ranges may perform organizational maintenance in those areas behind the firing line any time the range is not scheduled for training. When maintenance is required forward of the firing line, the unit must schedule the maintenance through RFMSS to include an indication of how far down range personnel must go. For construction, range upgrade, or long term maintenance, the unit will coordinate with Range Control for temporary closing of the range (3 days or more).

b. Ranges must be scheduled for maintenance to ensure they remain operational. The priority given scheduled maintenance will depend on the complexity and operational status of the range. When range maintenance is scheduled, Range Control will not schedule firing on other ranges that would interfere with the scheduled range maintenance.

c. The NBC Branch, Operations and Training Division (OTD), Directorate of Operations and Training, schedules training for NBC qualification (545-4366/2616). The initial request may be made by telephone to Operations and Training Division, DPTM, 545-6105/2616/4366 and confirmed later by submission of a memorandum. The confirmation must contain date of use and number of personnel to be tested.

d. Hunting and fishing advisory information is disseminated three days in advance at various installation locations. No range/terrain requests will be accepted which impact upon the prior announced hunting and fishing activities.

e. Dekkar LZ, Lae DZ/LZ or Fryar DZ. For the purpose of scheduling, these training areas shall be considered to be within the same airspace. Overlapping training shall not be allowed. DPTM, Range Control is responsible for managing the scheduling process in accordance with the following:

(1) Requests to use Dekkar/Lae/Fryar for any training mission, except Night Vision Systems (NVS) training, shall normally be submitted in writing to Commander, USAIC, ATTN: ATSH-OTR. (Range Control), at least 12 weeks in advance. Include the following information: Location and date of planned activity, time block, activity planned; type and number of aircraft planned; whether or not a CCT/PFDR will be used. Requests to use Dekkar LZ for NVS training shall normally be submitted in writing 7 days in advance. Requests for NVS training submitted within less than 7 days may be accomplished by telephonic means but, may be disapproved due to conflicts with a higher priority scheduled training activity

(2) Airspace use conflicts should normally be resolved by the Fort Benning AT&A Officer.

f. The 75TH Ranger Regiment has exclusive use of the shooting house on Brann Range and Farnsworth Range. The Ranger Training Brigade has exclusive use of Hurley Hill and the Darby Queen obstacle course. All other units are by exception and require approval of the DPTM, RTB, and 75TH Regt Commander.

g. Ranges assigned to the USAMU are Olympic Style Ranges and not considered acceptable for training most METL tasks associated with standard Army Marksmanship. U.S. Army Marksmanship Unit Competitive Ranges are Permanently scheduled for USAMU training and competition missions unless cancelled by USAMU. Any unit that requires the use of a USAMU Competition Range must submit a request for co-use through Range Control. h. Ranges assigned to the Soldier Battlelab (SBL), McKenna MOUT, Kunzig and Griswold Ranges, are highly instrumented and require coordination to insure the ranges are capable of supporting the training requested. Instrumentation does not prohibit use of these ranges. SBL must be included in the earliest phases of coordination for use of these facilities and the person coordinated with included in the remarks section of the range request.

Chapter 5 Requirements

5-1. Firing times.

a. The Malone Range Complex will not be allowed to open prior to 0900 from 1 October to 30 April and prior to 0800 from 1 May to 30 September in order to allow pre-operation checks on the automated ranges.

b. The period 1200-1300 daily is normally used to change out targets and perform other down range activities. However, these activities must be confirmed daily with Range Control prior to 1100 to allow affected ranges to be placed on check fire. Units will be advised by Range Control of any requirements to cease fire between 1200-1300.

c. Requests to fire .50 caliber or larger munitions, including demolitions of any amount, during the hours 2400-0600 must be approved at the Major Subordinate Command level.

d. TRADOC POI range firing will be conducted as required by the Program of Instruction, without regard to time.

e. The Director of Operations and Training will advise the Public Affairs Office of all firing scheduled past 2400. The Public Affairs Office will provide widest dissemination of information to the local news media.

5-2. **Firing limitations.** All firing will be confined to the established limits of fire and impact areas. Under no circumstances will an Officer in Charge or other personnel approve the firing of any type ammunition outside established limits of fire without the approval of the Chief, Range Control. No portion of the surface danger zone for a weapon or explosives can intersect or cross the following areas without a waiver of safety criteria as defined in DA Pamphlet 385-63:

a. Federal or state highways.

b. Railroad rights of way.

c. The Chattahoochee River.

d. Be within 500 meters of the Fort Benning military reservation boundary.

e. Built up areas on the reservation.

5-3. **Safety waivers.** Range Control will only approve firing for which the surface danger zone (SDZ) does not impact on other ranges, training areas or facilities. Unit requests for waiver may be submitted through Range Control to the Commanding General under the following conditions and policy:

a. The SDZ can be made smaller when terrain, artificial barriers or controlling conditions make smaller areas safe.

b. Firing procedures are modified to increase realism in training.

c. Request must include a statement as to actions taken to preclude a waiver requirement.

d. A risk management worksheet must be completed and included with the request. (See para 5-26.)

e. Request must be submitted a minimum of 90 days in advance of proposed firing.

f. Waivers granted must be renewed annually unless otherwise indicated, and must be reviewed semiannually.

5-4. Munitions management.

a. DA Pamphlet 710-2-1 dictates policy additions to tighten control of selected ammunition and explosive items. All training that incorporates the use of military explosives and firing systems require DA Form 2203-R, Demolition Reconnaissance Record, to be submitted to Range Control. For guidance in the use of DA Form 2203-R, see FM 5-250. The Demolition Reconnaissance Report submitted from the training units must be approved one level above the unit requesting explosives, but not less than battalion. At the conclusion of training, commanders of units will provide Range Control the following:

(1) Time range was opened,

(2) Type and amount of explosives consumed,

(3) Type of firing system, and

(4) Amount of ammunition expended on DA Form 5692-R with a copy of DA Form 581 showing the ammunition issued.

b. Range Control will compare amount of ammunition reported as consumed with the Demolition Reconnaissance Report and the issue form, DA Form 581. Any differences will be challenged within one working day and reconciliation by the using unit will be submitted. Range Control will record/attach documentation to DA Form 1594 maintained for each 24-hour period. A demolition plan is not required for category 1 items, grenades and mines.

c. Field Ammunition Supply points will be established in accordance with DA Pamphlet 710-2-1. The DOL Quality Assurance Ammunition Surveillance Office, telephone 544-7490/7489 may be contacted for technical advice and guidance.

5-5. Demolitions and explosives. The use of demolitions and explosives in training will be closely controlled to ensure safety. Specific precautions and/or procedures to be taken are as follows:

a. A maximum of five 42.5 pound cratering or shape charges will be employed at one time with 10-15 second delay between detonations.

b. All personnel instructing the use of explosives or exercising immediate close supervision in the use of explosives other than pyrotechnics or hand-fired simulators will be graduates of the USAIS Demolition Permit Course and must possess a valid "Demolition Permit Card." This course is required for those instructional and support personnel preparing, installing, priming, and detonating standard military explosives (TNT, C4, and so forth), special military charges (shaped charges, cratering charges, Bangalore Torpedoes, and so forth), or simulators using the standard military blasting cap (electric or non-electric) or Modernized Demolition Initiators as the device to produce the desired explosive effect. The Demolition Permit Card is valid for a two-year period. Claymore mines are not considered a military explosive.

c. Commanders, OICs and Safety Officers will ensure that persons using pyrotechnics or explosive hand-fired simulators are thoroughly trained in safe preparation, control and use of these items.

d. All blasting activities employing electrical initiating systems are to be suspended during an electrical storm or when one is impending.

5-6. Hand grenade ranges. In addition to any restriction listed on the approved firing data for these ranges, the following procedures apply.

a. Only the hand grenades brought to the throwing bay by the Soldier throwing will be in the bay. Under no circumstances will hand grenades be stocked in the throwing bay. If two hand grenades are present, one grenade will be left in the bottom of its container and placed in one of the front corners of the bay. This procedure will reduce the chance that the extra grenade could be ejected from the bay by the detonation of a dropped grenade.

b. Only one grenade at a time will be thrown into each bermed impact area, regardless of the number of throwing bays being used. Grenades from the same or other bays will not be thrown into the bermed impact area until the OIC or Safety Officer has assured that the preceding grenade has exploded. Grenade duds will be reported to Range Control immediately. Throwing of hand grenades into the bermed impact area containing the dud will cease immediately and will not be resumed until the 789th Ordnance Detachment (EOD) has destroyed the dud grenade.

c. Tenant units assigned installation hand grenade ranges will develop and furnish Range Control, DPTM, a copy of their Range Standing Operating Procedures (SOP).

5-7. Blank ammunition.

a. 5.56mm blank ammunition will not be fired at personnel at distances less than 20 feet.

b. Each round of blank ammunition will be inspected by the person receipting for the ammunition before using to assure the following:

(1) Each round is blank ammunition.

(2) The ammunition has not been altered or tampered with in any way.

(3) Grenade cartridges are not being used as blank ammunition.

c. Use of blank ammunition in hand-to-hand training is prohibited.

5-8. Disposal of duds. Every effort will be made to note the location of duds or to observe and record location of rounds failing to explode at time of impact. This applies whether firing into a permanent dud area or in a temporary dud area. Fire direction personnel will record known or suspected duds from mortars and artillery fire. The Safety Officer will record duds from direct fire weapons. All duds will be reported as indicated below:

a. Hand grenade duds will be reported to Range Control for immediate destruction in place by the 789th Ordnance Detachment (EOD). Grenade training will cease until the dud grenade is destroyed. Dud

rates that meet or exceed quantities listed in TBL-B-1 of AR 75-1 should be reported to the Ammunition Inspector, Ammunition Supply Point (ASP) (544-7490/544-7489/544-6015).

b. Upon completion of firing, when firing is conducted outside a permanent dud area, a thorough search of the impact area will be made by using unit. Duds found will be marked and reported to Range Control for disposal. Marking will be accomplished by stringing or laying durable material, engineer tape, or other distinctive material. Do not drive objects in the ground or jolt duds in any manner. In addition to marking, a guide will be furnished to assist EOD personnel in locating the duds. EOD will notify Range Control prior to detonating any dud and upon completion of its mission. A report will be submitted to Range Control, telephone (545-3474/3479) or by radio, containing the following information as applicable:

(1) Coordinates of the dud(s).

(2) Location of terrain features.

(3) Number of dud(s).

(4) Type and caliber of dud(s).

(5) Method by which marked.

(6) Names of individuals who will be available to assist EOD personnel.

(7) Name, unit, and phone number of individual making report.

c. Upon completion of dud disposal by EOD personnel in nonpermanent dud areas, the OIC will be responsible for submitting a written report to Range Control that a surface search has been conducted and all known duds have been reported or destroyed.

d. When firing is conducted into a permanent dud area and rounds impact in the area, a record will be maintained indicating the number and caliber of duds observed or suspected. Upon completion of firing, this information will be submitted to Range Control (545-3474/3479).

5-9. Disposal of unused propellants. Do not fire unused propellant charges. They should be removed to a storage area, preferably 30 to 40 feet from the nearest weapon, until they can be burned. The procedures for burning are:

a. Select the nearest approved propellant burn pit (table 5-1).

b. Determine the wind direction.

c. Place propellant/charge increments in a single layered row not more than 12 inches wide.

d. Arrange the row so that the propellant will burn into the wind.

e. Lay a train of combustible material about 15 feet long and perpendicular to and at the downwind side of the row of propellant increments. Light this train at the end farthest from the increments.

NOTE: Burning propellant creates a very large flash and a lot of smoke. In a tactical environment, the platoon leader/OIC must ensure that burning powder does not compromise the camouflage and concealment effort.

Table 5-1. Propellant burn pit locations.

Hartell Bunker Area	FP 78	143903
Cactus Area	FP 206	191893
Delta Area	FP 600	135850
Oscar Area	FP 700	109996
Malone 25	NA	009923
Coolidge Left	NA	009923
Red Cloud	NA	949817

5-10. Procedures for Misfires.

a. Misfires are removed only on the command of the OIC.

b. Misfire procedures are explained in the appropriate weapon and/or ammunition technical manual and field manuals. When there is doubt, contact the ASP or EOD through Range Control (545-3474/3479).

c. If the misfire is not corrected after following all procedures listed in the appropriate TM/FM, follow malfunction procedures as outlined in para 9-2, this regulation.

d. The correct procedure for handling misfires at the range:

1. Closed containers (ammunition can marked "MISFIRES") will be used for the collection of misfires at each fire range.

2. The MISFIRE container shall stay closed except to add or remove misfires.

3. MISFIRES SHALL NOT BE COLLECTED in open containers or cardboard boxes. EMPB (545-7579/7570).

e. Prior to turn-in to the ASP, misfired ammunition should be re-packed into the original container, tagged for identification, and kept separate from other ammunition items. For mortar ammunition, safety pins will be replaced in fuses prior to turn-in. If the pin cannot be replaced, notify Range Control (545-3474/3479).

5-11. Erratic firing. Any projectile, which lands outside of firing limits, will be immediately reported to Range Control by radio. Reports will include the approximate coordinates of impact, ammunition, caliber, estimated back azimuth, and the time the round was observed. The Chief, Range Control, or his representative, will make a decision as to whether the range involved should be closed until the cause is determined and corrected. The incident will be reported by the Officer in Charge of firing to his unit commander, and the OIC will submit a full report to the Commanding General, USAIC (through channels). The Chief, Range Control will conduct an investigation and submit a report when directed by the Director of Operations and Training.

5-12. Stream crossing sites. Stream fording and crossing with wheeled and tracked vehicles is approved for locations in table 5-2.

5-13. Privately owned vehicles (POVs) on firing ranges. Parking of POVs will be in designated parking areas only. Sites designated as parking areas must be approved by Range Control, DPTM. At no time are POVs permitted down range or on the firing lines.

Table 5-2. Stream crossing sites

Location	Grid
Cactus Road at Pineknott Creek	174909.
Buena Vista Road at Pineknott	131914.
Buena Vista at Uptotia Creek	108919.
Buena Vista at Randall Creek	076929.
Bullseye Road at Randall Creek	075959.
Hourglass Road at Ochillee Creek	054829.
Midwest Road at Randall Branch	066948.
Resaca Road at Sally Branch	126913

5-14. Road restrictions.

a. Administrative roads: The following are designated as administrative roads upon which normal administrative traffic is permitted at all times:

- (1) First Division, west of the Red Arrow and First Division intersection.
- (2) Second Armored Division.
- (3) Red Arrow, south of Buena Vista.
- (4) Dixie.
- (5) Sightseeing.
- (6) Jamestown.
- (7) Sunshine.
- (8) Moyer.
- (9) Wildcat.
- (10) 101st Airborne Division.
- (11) Tenth Armored Division.
- (12) Eighth Division.
- (13) Buena Vista from Schatulga to Uptotia Creek.
- (14) Hourglass.
- (15) Lorraine Road.
- (16) Red Diamond.
- (17) Underwood Rd.

b. During darkness, all vehicles operating on administrative roads must use driving lights.

c. Units conducting road marches.

(1) Foot Marches. During darkness will place traffic guards equipped with flashlights or similar lighting devices and reflectorized vest (or cross straps and sleevelets) approximately 50 meters to the front and rear of the column. The guards will be instructed to wave lights to attract the attention of approaching traffic. Units conducting road marches must establish and maintain communication with their major unit or Range Control to assist in handling of any emergencies that may arise.

(2) Vehicle Road Marches on Tactical roads:

(a) Maximum speeds for tactical roads and limitations are depicted in table 5-3.

(b) All roads used in support of training (including tactical road marches) must be scheduled in the same manner as training areas (see chapter 4).

(c) When roadblocks, craters, blackout driving, night observation device driving, CS, and so forth, are used in training, road guards will be positioned at appropriate points to control and re-direct administrative traffic. Road guards will be equipped with yellow or similar type traffic signaling devices. Emergency vehicles (ambulances, military police, fire, to include forestry fire suppression vehicles) and Range Control personnel will be permitted through tactical roadblocks. Units conducting vehicle road marches must establish and maintain communication with their major unit or Range Control to assist in handling of any emergencies that may arise.

5-15. Police and clearance of ranges, training areas/ facilities and bivouac areas.

a. Units/activities assigned facilities in table 2-1 will establish the clearance requirements for using units. Range Control, DPTM, will conduct periodic inspections of these areas.

b. Range/training areas will be thoroughly policed of expended brass and ammunition residue. Expended brass and residue will be turned in to the Ammunition Supply Point in accordance with DA Pam 710-2-1. Live fire maneuver training areas and individual marksmanship ranges with fixed firing lines will be policed 100 percent of brass and ammunition residue. Training areas utilized for free maneuver field training will be policed of brass and ammunition residue to the maximum extent possible.

c. Ammunition found on the installation may be turned in at the Ammunition Supply Point (ASP), Monday-Friday, from 0800-1630. Ammunition found during nonduty hours, holidays and weekends may be turned in at the Ammunition Holding Area. Remember, prior to moving abandoned ammunition, ensure that it is safe to do so. If doubt exists, contact the 789th Ordnance Detachment (EOD), 545-2914/4154, or the ASP, 544-6710/7489.

d. Garbage and rubbish other than cardboard, office type paper, cans, bottles, and plastic jugs will be collected and stored in standard garbage cans and disposed of at the Material Recovery Facility. All cardboard, office type paper, cans, and bottles will be collected, stored in separate cardboard boxes, then delivered to Material Recovery Facility, building 4000, Cusseta Road. Cans and bottles are to be rinsed out. Burning or burying of garbage, refuse, or rubbish on any range or location on Fort Benning is prohibited.

e. All greasy water, grease, and edible waste generated by field kitchens will be returned to the unit area and disposed of in an edible food container. Units may request support from DPW Energy and Utilities Division, 545-4749.

f. In addition to requirements outlined above, foxholes, trenches, drainage ditches, grease pits and latrines will be filled, domed, and marked as appropriate.

g. Medical Department Activity (MEDDAC) is available for consultation on sanitation or health problems.

Table 5-3. Maximum speeds for tactical roads and limitations

Type Vehicle	Limitation	Maximum Speed
Wheeled Vehicle	Unless otherwise posted	30 mph
Tracked	Not in convoy	25 mph
Lead vehicle	Convoy	20 mph
Other vehicle	Convoy	25 mph
Convoy	Crossing bridges	5 mph
Wheeled Tracked	Passing troops	10 mph
	Blackout	5 mph
Distance between vehicles must be not less than 100 meters.		
Distance must increase for dust conditions.		

5-16. Fires. Fires for heating and/or cooking may be used at the discretion of the unit commander, provided such fires are not locally prohibited due to a dry spell, and are subject to the following restrictions:

a. Fires will be attended.

b. All leaves, brush, pine needles, and so forth, must be scraped away from the area of the fire for a distance of at least four feet.

c. Fires will not be permitted within 50 feet of wooden building, bleachers or in any location where loss of control might lead to a facility, forest, or brush fire.

5-17. Environmental protection. All training activities shall be preceded by the timely submission of a completed FB Form 144-R to the Environmental Management Division (EMD), Directorate of Public Works (DPW). See paragraph 5-17, e for details on environmental coordination. Commanders will assess the impact or consequences of actions using the following considerations:

a. Vegetation: Live weeds, underbrush and grass may be used for camouflage when required. Care will be taken to ensure the ground is not stripped bare of vegetation especially in repeatedly utilized areas. Trees uprooted and limbs broken by high winds may be removed and utilized for camouflage. Removal of intact and healthy trees or limbs in training areas for camouflage, firewood, or any other purpose will not be accomplished without prior approval of DPW using the completed FB Form 144-R.

b. Historic and archeological sites: Any activity which is of a ground disturbing nature (such as, construction, vehicle maneuvering, timber harvesting, digging of fighting positions, and so forth) within areas identified as historic and archeological sites shall be evaluated for possible negative impacts to cultural resources by the EMD, DPW prior to commencement using the FB Form 144-R. Pedestrian traffic is not considered ground disturbing activity. Coordination with the EMD, DPW shall be early in the planning process in order to avoid unnecessary delays. Knowledge of specific locations of archeological sites is restricted. Proponents of specific units and activities must submit the FB Form 144-R to the EMD to determine if their project conflicts with archeological resources. Disturbing archeological sites may be treated as a felony under applicable laws. Units and Activities will be provided guidance using the FB Form 144-R.

c. Red-Cockaded woodpecker (RCW): The RCW is a federally listed endangered species. The RCW cavity tree is marked with two 6 - 8 inch wide white bands, painted on the tree(s), at eye level. A numbered metal identity tag is attached to each tree. Each RCW cavity tree is protected by a 200-foot buffer zone. This is referred to as the cluster.. This cluster buffer zone is identified by 10-inch diamond shaped signs designating the area as an endangered species (RCW) site. Units and activities will use the FB Form 210-4-4-R (Environmental Checklist) to ensure the following:

(1) Activities permitted within the cluster: Military training within marked buffer zone limited to activities of a transient nature (less than 2 hours occupation); Hasty fighting positions - light infantry, hand digging only (2 hours maximum); foot transit through cluster; wheeled/armored vehicle transit through cluster allowed but must not occupy or traverse within 50 feet of marked cavity tree, unless on existing road, trail or fire-break; cutting natural camouflage, hardwood only; vehicle maintenance (2 hours maximum); 7.62mm and below, 0.50 cal blank firing; artillery/hand/smoke grenade simulators; Hoffman type devices; smoke (haze ops only) but generator must be set up outside boundary; star clusters; parachute flares.

(2) Activities not permitted within a cluster: mechanized infantry/armor, deliberate defense; command post; assembly area; CS/CSS sites; signal posts; camouflage netting; artillery firing point/position; MLRS firing position; CS/riot agents; incendiary devices including trip flares; HC smoke of any type; tank ditches; deliberate individual, crew-served, weapons, vehicle or other fighting positions (except hasty); cutting or intentionally destroying pine trees (unless approved by 144R) (table 5-4); rotary wing aircraft are restricted from hovering over clusters during nest period of 1 April to 31 July.

(3) All excavations must be filled in after their use. Small arms live fire exercises will be conducted only in areas where damage to RCW cavity trees and foraging habitat trees (mature pine trees within 1/2 mile of an RCW cluster) will not occur. Live fire exercises (except on established ranges) and exercises using CS Gas and obscurant smoke (except smoke grenades) must be coordinated with Range Control, DPTM, and EMD, DPW.

d. Gopher Tortoise. This species is a large terrestrial reptile currently designated as species of concern by the U.S. Fish and Wildlife Service. This status provides the tortoise with protection from activities that may result in habitat destruction or cause harassment or harm. The gopher tortoise is found in areas of well-drained sandy soils in open woods or fields and has a large easily recognized burrow. Some burrows have been delineated with a single white, one-inch diameter, plastic pipe. Digging and vehicular use is prohibited within 50 feet of any tortoise burrow, marked or unmarked, to prevent damage to the burrow and possible harm to the tortoise. Sensitive area signs are also used to identify locations of groups of gopher tortoise burrows in areas of concentrated

training. Contact Range Control, DPTM, or Conservation Branch, DPW, for additional information or assistance.

Table 5-4. Training Activity Within 200' Buffer Zone

Maneuver and Bivouac:	
Hasty defense, Light Infantry, Hand digging only, 2 hrs max	Yes
Foot Transit	Yes
Wheel/Track Vehicle Transit	Yes (1)
Cutting Hardwood Camouflage	Yes
Vehicle Maintenance, 2 hrs max	Yes
Hasty defense, Mechanized Infantry/Armor	No
Deliberate Defense, Light Infantry	No
Deliberate Defense, Mechanized Infantry/Armor	No
Established Command Post, Light Infantry	No
Assembly Area Operations, Light Infantry, Mech Infantry and Armor	No
Established CS/CSS Sites	No
Weapons Firing:	
7.62mm and Below Blank Firing	Yes
.50 Cal Blank Firing	Yes
Artillery Firing Position	No
MLRS Firing Position	No
All Others	No
NOISE	
Artillery/Hand Grenade Simulators	Yes
Hoffman Type Devices	Yes
Generators	No
Pyrotechnics/Smoke:	
Smoke, Haze Operations, Generators or Pots	Yes (2)
Smoke Grenades	Yes
Star Cluster/Parachute Flares	Yes
Incendiary Device to Include Trip Flares	No
CS/Riot Gas	No
HC smoke of Any Type	No
Maneuver and Bivouac:	
Digging	
Hasty Individual Fighting Positions, Hand Digging Only	Yes
Tank Ditches	No
Deliberate Individual Fighting Positions	No
Crew-served Weapons Fighting Positions	No
Vehicle Fighting Positions	No
Vehicle Survivability Postings	No
Other Survivability/Force Protection Positions	No
Note: Yes means that the activity may be conducted within 200 feet of a marked cavity tree	
(1) Vehicles (wheel and track) will not get closer than 50 feet of a marked cavity tree unless on an existing road or trail	
(2) Smoke generators and smoke pots will not be set up within 200 feet of a marked cavity tree, but the smoke may drift inside the 200 foot buffer	

e. Environmental assessments.

(1) Documentation is required for all field training exercises and/or activities. In addition to endangered species and historical/archeological sites protection, assessments will cover all aspects of the natural and human environment, i.e. soil erosion, wetland protection, hazardous materials spill prevention and/or control, noise management, and so forth. When existing Environmental Assessments (EA) and Environmental Impact Statements (EIS) adequately cover the proposed action, an expeditious review processes may be expected.

(2) The EMD, Directorate of Public Works, (DPW) 545-4211, may be consulted for assistance in determining the level of consideration or documentation required. Records of Environmental Consideration, FB Form 144-R, must be prepared and submitted to the DPW **ten weeks prior to the exercise**. The form should describe the activity to be conducted in sufficient detail for analysis of possible negative impacts to the environment. All field training exercises require submittal of FB Form 144-R.

(3) The EMD will evaluate the proposed activity and determine if it is adequately covered in existing documents. If not, a joint survey of proposed areas/ activities is conducted to determine possible impacts. A concurrence/ nonconcurrence will be rendered within 30 calendar days after receipt of the FB Form 144-R. A nonconcurrence will be accompanied by reasons and conditions under which alternatives can be favorably considered. Most actions will receive concurrence with conditions, to include observance of sensitive areas, spill protocols, and so forth. Activities may be conducted in accordance with subparagraph (7) below. Some actions will be returned for lack of pertinent information; checked as "Other". Activities may not be conducted without full or conditional concurrence from DPW-EMD.

(4) Activities that are not submitted in time for a 30 calendar-day environmental review must be supported by a memorandum of exception justifying the urgency or priority of the planned activity. The parent unit commander, executive officer, S-3 officer, or Senior Environmental Coordinator must sign this memorandum of exception.

(5) Desired areas should be specifically identified rather than blanket large training compartments. The assessment process may require extensive survey and be a time-consuming operation, particularly for an exercise or area not previously evaluated. However, the majority of the installation has been surveyed for various areas of concern and lengthy review periods are the exception, not the rule.

(6) Whenever practical, commanders are encouraged to repeat use of training sites previously evaluated by EMD for the same type of training activities. Repetitive actions scheduled for the same sites by the same units, using the same training scenarios, involving the same amount of troops, equipment, supply, ammunition, and so forth, should be submitted for environmental consideration and concurrence on a periodical basis (not to exceed 12 months) rather than on an iteration basis. The recommended review period would be 1 January to 31 December of each year.

(7) Mitigation of environmental assessment problems: In cases where restrictions noted on completed FB Forms 144-R are questionable or may adversely impact training, a panel is organized to address issues for timely solutions. A group comprised of the proponent, representatives of the DPTM, DPW, and SJA will review the issue to attempt to remedy the situation. Since most restrictions are the result of environmental laws and/or regulatory guidance, which cannot be compromised, the emphasis at this point will be to modify the exercise or relocate to an area without restrictions.

f. In the case of an environmental incident (any adverse impact on the environment), an Environmental Incident Report Form (FB Form 31) should be completed and forwarded to the command post within 24 hours of the incident. OIC will immediately notify Range Control, 545-3474 or by hand held radio.

5-18. Protected airspace. To protect the airspace in the vicinity of Lawson Army Airfield, Areas A1-4, A-14, A-18, A-19, CC-3, and CC-4, V, W, X, Y, and Z are designated as controlled and limited training areas. The following restrictions apply for use of those areas for tactical training and required close coordination with Range Control and Fort Benning AT&A Officer if users of these areas desire to use listed items or devices:

a. No invisible hazards to USAIC flight operations such as:

- (1) Surface fired weapons or rockets.
- (2) Demolition or blasting.
- (3) Air-to-ground weapon firing (live or inert).
- (4) Dropping of bombs (live or inert).
- (5) Air-to-air weapon firing.
- (6) Dropping of any other objects from an aircraft (parachute jumps or drops are discussed in chapter 6).

(7) Laser beams which could result in injury to personnel or damage to aircraft or components.

(8) Radiation-producing devices which could result in injury to personnel or damages to aircraft or components.

(9) Radios or other electronic devices which could result in interference with operation of aircraft or components or with NavAid or meteorological equipment serving Lawson Airfield.

(10) Communications wire (WD-1) laid in trees or on/over landing/pickup zones.

b. Discharge of pyrotechnics on the ground or in the air.

c. Operation of bright lights, which could create blinding effect to an aircrew member (such as, search lights, flash bombs, shells, or any other device emitting extremely bright lights).

d. Operation or discharge of smoke generating device or equipment.

e. Flying of miniature aircraft or drone.

f. Flying of any other weight lifting device such as, para-kite, gyrocopter, hang glider, whether in free flight or being towed by cable/rope.

g. Discharge of toxic or noxious chemicals, which could result in injury or incapacitation of personnel or damage to aircraft or components.

h. Operation of any other device which would interfere with normal operation of aircraft or the NavAids and meteorological equipment supporting operation of Lawson AAF.

i. Flying certain balloons or kites (moored or free), which are controlled under Part 101, Federal Aviation Regulations, and present hazard to aviation.

j. Erection of structures or any obstruction (temporary or permanent), which could be classed as a hazard to aircraft.

k. Parachute jumps or equipment drops by parachute will be covered by USAIC Regulation 350-3. Designation of drop zones or points from which aircraft may be exited will be described in subject regulation/directives only after proper coordination is accomplished with all military aviation interests at Fort Benning.

l. Sources of smoke, which could be carried across the airfield or approaches thereto by wind or weather conditions, will be considered a hazard to aircraft, even though the source is located outside the protected area. This includes controlled burning of forest lands.

m. Operation of searchlights, which are aimed in the direction of the airfield or normal flight paths, used in landing or takeoff will be considered a hazard to aircraft, even though the light source is located outside the protected area.

n. Operation of drone or other engine/rocket propelled pilot less aircraft or missiles, which if control were lost and fuel would permit flight into the area, will be considered a hazard to aviation.

5-19. River crossing. Units conducting river crossing exercises that block the Chattahoochee River must coordinate with the U.S. Army Corps of Engineers, Mobile, AL, telephone number (251) 690-3137, 45 days prior to date of exercise. Confirmation of the coordination to be provided to Range Control, DPTM.

5-20. Restrictions. Personnel participating in training and recreational activities will be governed by the policies contained herein, particularly entry into restricted areas.

a. Training areas. Prior to entering any training area, all personnel, military or civilian, will obtain clearance from the unit using the facility and/or Range Control. Civilian personnel, such as military family members and local populace, must receive authorization from the installation range control officer to enter the training complex to participate in or observe capabilities exercises, fire power demonstrations, training courses, competitions, or other types of firing. Such personnel will remain in designated safe areas as determined by the installation range control officer. Civilians, to include family members and DOD civilians, must have approval from the installation range control officer to fire weapons within the installation training complex.

b. Permanent dud areas. These areas are located within certain training areas. Permanent dud areas are unsafe for entry due to accumulation of unexploded live ordnance. Entry into permanent dud areas is prohibited at all times except with prior approval of Range Control. Signs reading "DANGER-DUD AREA - KEEP OUT" mark the perimeters of these areas. The permanent dud areas are depicted on the Fort Benning General Information Map 1:50,000, and Range Map 1:25,000, sheets A and B.

c. Firing and impact areas. These are areas within which firing of live ordnance is being conducted. Signs reading "DANGER-FIRING AREA-KEEP OUT" mark the perimeters of firing areas. All persons, military, military dependents, and civilians, are forbidden to enter permanent danger zones or pass beyond warning signs, "FIRING AREA" signs, or roadblocks except on authority of the Range Control.

d. Firing constraints. The following must be considered and adhered to in development and execution of exercises.

(1) No overhead fire is permitted over unprotected troops except as listed in AR 385-63. General restrictions are as follows:

(a) Only ammunition that is cleared for overhead fire is permitted.

(b) Artillery, when fired at minimum safe quadrants and minimum fuze arming times, will be computed as required by AR 385-63. Computation of firing data will be in accordance with technical procedures of FM 6-50.

(c) Machine guns (50 cal and 7.62mm) fired only from a stationary position with a trajectory of not less than 5 meters over the head of unprotected troops or the highest obstruction in the field of fire, whichever is higher.

(2) Flanking fire for small arms, to include ground or vehicle mounted machine guns, is limited to angle of 267 mils (15 degrees) or more between the limit of fire and the closest individuals and provided all rounds impact downrange from the individual.

(3) Hand grenades can only be used as follows:

(a) A specific impact area must be designated and be free of obstacles (trees, tank hulls, and so forth).

(b) The general precautions prescribed by AR 385-63 for hand grenade ranges must be observed.

(4) Certain HE weapons can be used only when fired into specifically dedicated dud areas through which troops may not maneuver in accordance with AR 385-63.

(5) Training with blank ammunition and pyrotechnics is not permitted within 500 meters of the installation boundaries.

e. Range gates. Gates located at entrance of ranges. Each range having a gate will be locked when the range is not operational; such as, at night, on weekends, holidays, and so forth. Units assigned a particular range will place a lock on the range gate. The Provost marshal (range security personnel) will make frequent checks after duty hours and on weekends to ensure that range gates are locked. When gates are found open, the responsible units will be notified and requested to take immediate corrective action.

f. Training is not allowed within 200 meters of the shorelines around Twilight and Kings Ponds located in the vicinity of grids 992842 and 067827 respectively. Tracked vehicles are prohibited from crossing the dams of these ponds or using access roads associated with them.

g. Tracked and wheeled vehicles are prohibited from heliports and landing zones.

h. Use of C/S gas is not authorized within distances indicated below:

- (1) Administrative roads - 500 meters
- (2) Recreational areas - 500 meters
- (3) Cantonment areas - 500 meters
- (4) Installation boundaries - 1000 meters

i. Open or closed sanitary landfills are off limits to all except authorized personnel.

j. Using units/training activities are required to contact Range Control Radio Control Center prior to moving down range (forward of the firing line) and to advise same upon returning.

5-21. Control of forest fires.

a. Prevention of forest fires: The major causes of forest fires at Fort Benning are incendiary training aids such as flares, blanks, simulators, pyrotechnics, smoke grenades, and firecrackers. Other causes include incendiary ammunition, careless use of cigarettes and matches, improper control of campfires, and incendiary and smoke devices dropped from aircraft.

b. Fire danger classes. The following danger classes indicate the behavior pattern of fire in forestlands and grasslands (table 5-5).

c. Responsibilities.

(1) Officer in charge of troops training: In order to reduce the forest fire incident rate at Fort Benning, the Officer in Charge of troops training in the field should take the following precautions:

(a) When a fire danger class 4 is reached, the use of tracers and incendiary training aids such as flares, simulators, pyrotechnics, smoke grenades, firecrackers and open fires will cease immediately. Blanks may be used. Exception to discharge incendiary ammunition and general pyrotechnics in all areas of the military reservation must be requested through Range Operations Branch by major unit S3/Operations Chief. Exceptions may be granted to that training which is most critical to unit mission. The EMD, DPW, will be notified of exceptions.

(b) When a fire danger class 5 is reached, the use of all incendiary type ammunition will cease immediately. Blanks may be used. Exception to this policy may be granted to enhance the most critical training and must be requested from Range Control by the major unit S3/Operations Chief for all ranges and TAs. Range Control will consult with EMD, DPW, prior to granting exceptions to policy while fire danger class 5 is in effect.

(c) Appoint a noncommissioned officer daily while in the field or range as unit fire marshal to ensure all personnel have been indoctrinated concerning the safe use of incendiary devices and to supervise the immediate suppression of fires.

(2) Director of Public Works (DPW):

(a) Supervises forest fire prevention and suppression operations, and conducts fire prevention measures and inspections of property to ensure that adequate protective measures are maintained.

(b) Maintains forest fire weather station to determine fire hazard conditions.

(c) Notifies Range Control Operations of the fire danger class when fire hazard conditions become very high or extreme, or are expected to become very high or extreme.

(3) Director of Plans, Training, and Mobilization (DPTM):

(a) Notifies major unit S3/training officers and ranges and training areas upon receipt of very high fire or extreme hazard condition notification from DPW. Range Control has the authority to suspend use of incendiary training aids and ammunition in any training areas/ranges after appraising the hazard involved and in collaboration with Land Management Branch personnel.

(b) Coordinates air support for forest fire detection or observation when requested by the Land Management Branch, DPW.

(c) When notified by DPW that a class 4 or class 5 has been reached, Range Control will obtain from the using unit the name of the unit fire marshal and ensure his presence on site prior to granting exception to policy.

(4) Commanders:

(a) When a fire occurs in an area being used by a unit, the unit commander, ranking officer or NCO will be responsible for compliance with this chapter. The unit commander or senior person present will promptly report the fire and be responsible for suppression of the fire until Land Management Branch personnel arrive at the scene. All personnel and equipment present at the scene of fire will be made available to Land Management Branch personnel for fire suppression purposes.

(b) Commanders at all levels will indoctrinate personnel in wooded area fire protection and emphasize the necessity for cooperation with Land Management Branch personnel during fire suppression operations.

(c) Upon notification by DPW, Commanders shall investigate the cause of all fires within their assigned area(s) during danger class 4 or 5 days. Written response of corrective actions taken may be required.

d. Reporting.

(1) All forest fires or range fires on or near Fort Benning will be reported as soon as possible after discovery to the following:

(a) Post Fire Department, telephone 911.

(b) Land Management Branch, DPW, telephone 544-6304/6206.

(c) Range Control, DPTM, telephone 545-3474/3479, or by radio.

(2) Units involved in fighting a fire will submit a written report to the Chief, EMD within 24 hours to include the following:

(a) Date and time of fire.

(b) Location.

(c) Circumstances surrounding the discovery of the fire.

(d) Description of actions taken to extinguish the fire.

Table 5-5. Fire danger classes

SPREAD INDEX	Class	BEHAVIOR PATTERN
0-5 – Low	1	Fire will spread slowly and tend to die.
6-9 – Moderate	2	Fire will spread in grass and leaves till extinguished.
10-19 – High	3	Fire burns briskly and spreads rapidly. Short distance spotting may occur. Young conifer stands are at risk to fire damage.
20-39 – Very high	4	Fire spreads rapidly and tends to crown in young conifer stands. Long distance spotting is common. Intense convection activity may develop. Torching occurs in older timber.

Table 5-5. Fire danger classes (Continued)

40 – Extreme	5	Fire burns very briskly & above spreads very rapidly. Where heavy vegetation very rapidly. Where heavy vegetation occurs, fires may be unmanageable. Long distance spotting is common. Fire behavior is unpredictable and crown fires in older timber are common.
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e. Procedures. In many cases immediate action by units in the field will result in complete suppression of small woods fires that would otherwise cause a monetary loss to land and timber products as well as expensive suppression cost, loss in training time, and damage to the training site. There are two methods troop units may use in suppressing a forest fire:

(1) Direct method: This method is used on small, slow burning fires and is accomplished by pulling the burning debris back into the burned area with a rake, shovel, or other hand tools. Swatters, pine tops, or wet sand bags can also be used to beat out the fire.

(2) Indirect method. This method is used on larger fires that are more difficult to suppress. Removing flammable debris and exposing soil along a line in front of the fire, and allowing the fire to burn to the constructed firebreak accomplish the indirect method. The firebreak can be constructed with rakes, entrenching tools, shovels, or in the case of larger fires, with tractor fire plows or bulldozers. Suppression action should be taken first on the downwind side of the fire, then around the flanks and rear. Once the fire has been brought under control, all smoldering debris along the outer edge of the fire should be extinguished or mopped up to prevent the fire from starting again.

(3) Commanders of troops using training areas will order their personnel to extinguish fires in their locality regardless of origin, except those fires in Alfa, Kilo, and Malone Complex impact areas. Fire in those areas will be reported only. Range Control will provide clearance for personnel to enter these areas.

(4) When there are two or more units in the same area, all units will be responsible for fighting fires.

(5) When weapons firing by other units interfere with fire fighting details, Range Control will, upon request, stop the firing into those areas that are in danger.

(6) The officer or NCO supervising the field exercise will be responsible for the conduct of all military personnel fighting the fire. Upon arrival of Land Management Branch personnel, the ranking DPW representative will be in charge of all fire fighting activities, making use of the normal command echelon of troop units at the scene.

5-22. Dud clearance prior to engineer work

a. General. Prior to commencement of work on approved projects in range/training areas, every effort will be made to render the areas clear of duds and dangerous materials. Close coordination must be effected by all units/activities concerned.

b. Procedures.

(1) The unit/activities originating the work request will contact Range Control for clearance prior to entering the area. Range Control will furnish the requestor information concerning prior use of the area, such as, impact areas, and any other information that might be pertinent.

(2) The requestor is responsible for performing a detailed visual inspection of the project area. Range Control will provide assistance in searching known or suspected dud areas. All duds or suspected objects located will be marked by placing durable material, such as engineer tape, in a manner to designate location of the duds. Care must be taken to guard against jolting or disturbing the duds.

(3) Range Control will arrange with the 789th Ordnance Detachment (EOD) to investigate and render harmless all objects discovered and reported as a result of searches.

(4) Upon completion of clearing operations, the Chief, Range Control will prepare a statement to accompany the work request to the effect that "the area has been subjected to a detailed search, that explosive or dangerous material discovered was destroyed."

5-23. Organizational maintenance on ranges and training facilities.

a. Policies. Units are responsible for the organizational maintenance and repair of their assigned range/training facilities. Requirements beyond self-help capability will be performed by DPW as prescribed in USAIC Regulation 420-8 and other provisions herein.

b. Directorate of Logistics (DOL): Provide and fund in-shop and on-site Direct Support/General Support (DS/GS) maintenance of target systems.

c. Directorate of Public Works (DPW): Accomplish/coordinate and fund all repair of ranges and training areas that are not unit responsibilities or part of the Range Sponsorship Program (Appendix B). Fund those maintenance items that are not directly attributable to training. Provide materials required to accomplish owner maintenance.

d. Range Control Responsibilities:

(1) Provide standard targets and spare parts for RETS ranges (including printer paper).

(2) Perform organizational maintenance of targetry on automated rifle marksmanship and BFV/Tank ranges.

(3) Monitor and assist in prioritizing maintenance support provided by DOL.

(4) Notify units of the need to request additional/replacement plywood targets on BFV/Tank ranges.

(5) Notify units when requested fabricated targets are ready for pickup.

e. Unit Responsibilities. Units assigned ranges are responsible for:

(1) Minor repair to structures, such as, re-fastening of loose boards, interior painting, replacement of windowpanes, fastening of hardware, and so forth.

(2) Vegetation control, such as, bushes obstructing line of fire or causing unsafe conditions.

(3) Maintenance of grounds to include cutting of grass around structures to a distance that the units tractor mowers can operate and clearing all flammable material to 2 meters from structures.

(4) Repair and maintenance of firing limit markers, targets, target frames, and cleaning of target coffins to include removal of dirt around moving target monorails (excluding RETS ranges).

(5) Maintain an adequate supply of targets and target frames on site. Request plastic/paper targets from Range Control. Request construction of target frames and plywood targets used on BFV/Tank ranges from DPW via DA Form 4283 through Range Control.

(6) Correct minor drainage deficiencies to include cleaning of ditches and culverts.

(7) Change out and service M31A1 target lifting devices and hit sensors.

(8) Perform all required maintenance including, but not limited to, erosion control, frontal protection realignment or replacement and grass cutting on target berms.

(9) Keep latrines policed to include adding deodorant and water when needed. (See paragraph e. below.)

(10) Replace rail road ties and maintain earth berms for protection of target coffins and mechanisms.

(11) Position sand bags and skip plates, where authorized, for protection of target coffins and mechanisms.

f. Coordinating instructions:

(1) General maintenance requirements that cannot be accomplished through self-help, such as, electrical deficiencies and major earthwork, must be submitted to DPW by a service order, phone 545-2135. DA Form 4283 through Range Control, DPTM, must request requirements for modification or alteration. A FB Form 144-R must accompany each request.

(2) Request for repair of M31A1 electrically operated target mechanisms are made to DPW by on a DA Form 2407..

(3) Latrines: Specific support procedures for field latrines are as follows:

(a) Concrete Pit Type: For pump out, call DPW Contract Services, 545-5036/4749.

(b) Field Type: Submit DA Form 4283, Facilities Engineering Work Request, through Range Control Safety/Service Branch to re-site.

5-24. Recreational areas.

a. Listed below are the USAIC recreational areas that are adjacent to training areas and activities authorized. Use of the areas should be scheduled through Community Recreation Division, Directorate of Community Activities (DCA).

(1) Uchee Creek recreation area, located off 101st Airborne Division Road at the junction of Uchee Creek and the Chattahoochee River in Alabama.

(2) Kings Pond recreation area, located off Hourglass Road.

(3) Twilight Pond, located off 1st Division Road at Dickman Field in Harmony Church area.

(4) Weems Pond, located at Jamestown Road across from Warner Range.

b. Individuals are authorized to camp only at the Uchee Creek and Kings Pond recreation areas. Youth organizations are authorized to camp at sites coordinated through Community Recreation Division, DCA;

Real Property Master Planning Branch, DPW, and Range Control, Directorate of Plans, Training, and Mobilization (DPTM).

c. Hunting and fishing. USAIC Hunting and Fishing Regulation 210-2 govern this type recreation. To enter the reservation for hunting or fishing, all individuals must personally check the Range Clearance Maps prior to entering. Maps posted at the locations specified in USAIC Regulation 210-2.

d. Personnel participating in any type of recreational activity will be governed by the policies contained herein, particularly as they pertain to duds, impact areas, fires, and roadblocks.

5-25. Target systems support, automated and portable devices.

a. Three BFV/Tank ranges and seven rifle marksmanship ranges are equipped with automated targetry. A limited amount of remote controlled targetry and battlefield simulation devices are also available at Range Control for support of installation units and training activities. Maintenance of the automated equipment requires special training and is performed by personnel of Range Control. Units are required to provide target operators on the rifle marksmanship ranges while Range Control operates the targetry on BFV/Tank ranges. The frequency of use and required close coordination dictates that the portable equipment be maintained and operated by Range Control.

b. Range Control:

(1) Performs organizational maintenance on all automated targetry, to include the interior of protective coffins/emplacements on rifle marksmanship ranges.

(2) Operates BFV/Tank range targetry.

(3) Requests direct support assistance from DOL.

(4) Programs target scenarios to support unit requirements.

(5) Funds for, requisition, and warehouse spare parts, supplies (including printer paper) and order plywood targets for the BFV range when notified by unit assigned the range.

c. Units assigned ranges will:

(1) Oversee target operation of other users.

(2) Provide target operators for pre-operation checks and maintenance repair periods.

(3) Maintain towers and control equipment on rifle marksmanship ranges.

(4) Notify Range Control, DPTM, when additional/new plywood targets are needed for the BFV ranges and provide transportation upon completion of construction.

d. Using units will:

(1) Request support in accordance with the range and terrain scheduling process in chapter 4.

(2) Provide target operators on small arms RETS ranges.

(3) Provide security detail to ensure portable targetry and ancillary equipment is secured during all non-use periods.

e. Coordinating instructions:

(1) User requirements will be documented on FB Form 210-4-3-R. Request to schedule will be submitted using RFMSS. Realistic times of use are imperative. Final coordination for target systems support is required 2 weeks prior to requested dates in order to ensure adequacy of support.

(2) Rifle marksmanship ranges. Range Control will provide target mechanism maintenance/repair teams for pre-operations checks prior to each day's firing. The teams will be on call during scheduled firing to respond to any target malfunction. The team can be contacted on the Range Operations radio net or phone 545-3037.

5-26. Risk management

a. Risk Management Worksheets will be read and briefed to all range cadre and other using unit cadre.

b. Risk management will be implemented for all training development, training operations, and projects. Fort Benning Safety is responsible for providing information, assistance, and FB Form 46-R (Risk Management Worksheet) necessary for implementation. The Fort Benning Safety Office telephone number is 545-3267.

c. The Commanding General will approve all training/operations with residual risk level of high. The Commanding General will review risk management worksheets for maneuver live fire training/operations, at the "Buddy Team" level and above. These worksheets require two signatures, the Commanding Generals and Major Subordinate Commander.

d. Commander, 75th Ranger Regiment is authorized to implement control measures to mitigate certain high risk training events to moderate and to further delegate approval authority for operations and training on Fort Benning, Georgia with a residual risk of moderate, to the first 05/LTC in the chain of command.

e. A completed, signed FB Form 46-R, Risk Management Worksheet will be submitted with the FB Form 210-4-3-R when establishing training exercises.

5-27. Quality assurance program

a. Range Control, Directorate of Operations and Training, has the mission of conducting regular inspections of ranges and training areas for safety, environmental, and functional use compliance. Environmental includes hazardous waste/materials, cultural and historical sites, and natural resources/endangered species. Range Control personnel can be recognized by the blue cap with the Range Control patch attached.

b. Safety Environmental Compliance Quality Assurance Inspectors will conduct quality assurance inspections of all ranges and training areas on a periodic basis primarily while training is in session. These inspections will assure compliance with applicable safety, environmental, and functional use regulations. Inspectors will also survey range/training areas for unauthorized activity and uncontrolled forest fires.

c. Inspectors are authorized to stop training until major safety, environmental, and/or functional use violations are corrected (examples: firing outside approved areas, loaded weapons off the firing line, no communications with Range Control, troops bivouacked/dug-in at Red Cockaded Woodpecker nesting sites, and so forth).

d. Inspectors will utilize checklists, (FB Form 210-4-1-R, Range Safety/Operation Checklist) as a foundation for conducting range and training area inspections/evaluations. A reproducible copy of FB Form 210-4-1-R is provided at the back of this publication and may be reproduced on office copiers on an "as needed" basis. These checklists and any subsequent changes will be provided to organizations using and/or responsible for ranges and training areas.

e. Inspectors will brief OICs/NCICs on each inspection's initial findings. A copy of the completed checklist will be provided to Range Control and the unit/organization responsible for the range or training area. Inspectors will report any suspected/actual unauthorized activity and uncontrolled forest or structural fires to Range Control via radio and follow-up with a written report on the incident.

f. The DOL QASAS or other Ammunition Inspector(s) from the Quality Assurance Ammunition Surveillance Office are required to conduct, as a minimum, yearly range inspections. These inspections are required to check for compliance with explosive safety requirements and will normally be conducted while training is in session. Inspectors are authorized to stop training until major explosive safety violations are corrected.

5-28. BFV/tank vehicle flags. Vehicle will display flags to show the vehicle's weapon status. The following procedures apply:

a. Displaying no flag. Vehicle has no ammunition on board.

b. Displaying green flag. Vehicle has no ammunition on board. Vehicle participating in dry/MILES training.

c. Displaying green and red flags. Ammunition on board vehicle, electrical and manual safeties engaged.

d. Displaying yellow and red flags. Vehicle has experienced a malfunction or misfire. Weapon is pointed at target area. Electrical and manual safeties engaged. If not, range safety personnel are notified.

e. Displaying red flag. Vehicle engaging target area. Weapon loaded, all safeties off.

5-29. Maneuver live fire exercises.

a. The philosophy and training strategy outlined in Training Circular 7-9 will be followed.

b. Battalion Commanders will certify each live fire maneuver exercise prior to unit execution. They will certify the tactical concept of the operation, control measures, and planned fires with regard to the surface danger zone. Battalion Commanders will personally walk the terrain as a part of the certification process.

c. Cadre leaders will conduct a TEWT to review scenario safety measures and range restrictions. Commanders are responsible to ensure that cadre leaders are certified and trained to standard on tasks, conditions, standards specific to the training event.

d. Each participating Soldier must be qualified and zeroed with the M16, SAW, M240B and M60 gunners must have received familiarization training that includes transition firing and zero.

e. Each maneuver live fire will be preceded by a dry fire and blank fire. Each live fire exercise conducted under limited visibility must be preceded by a daylight dry, blank, live fire and a blank fire at night.

f. The live fire phase of the exercise may only be performed after the standard has been met and an after action review has been conducted for the blank-fire.

g. All Soldiers must have participated in the entire dry and blank fire before participating in any portion of the live fire.

h. Live fire exercises will not deviate from the blank fire exercise scenario.

i. The level of 110 supervision required on the range is two levels above the level of the unit receiving the training. Company Commanders and First Sergeants will be present for all maneuver live fire exercises.

j. Body Armor Vests and Helmets of a type appropriate to the unit (Kevlar or Ranger Body Armor) will be worn by Soldiers and cadre during maneuver live fire exercises.

5-30. Range and training area security.

a. Unit Commanders and activity directors are responsible for controlling and safeguarding all supply and equipment areas within their command/activity.

b. To deter larcenies of government equipment, all unit Commanders and activity directors will ensure that no sensitive items, portable communication equipment or high value items remain overnight in range personnel/storage buildings or training areas, unless these items are protected by an intrusion detection system, a wire mesh cage inside the building or dedicated guard.

c. Perimeter berms, Jersey barriers and gates have been installed to limit access to the Training Areas and Ranges. By-pass of these devices should be reported to Range Control, telephone 545-3474.

Chapter 6

Operation of Aircraft within the Reservation Boundaries.

6-1. Normal flight procedure. USAIC/FB AVN SOP, Fort Benning Aviation Flight Procedures, covers aircraft operations, rules, and procedures in the Fort Benning reservation, R3002, and the satellite camps. Before beginning a local VFR flight over Fort Benning the aircrews will acquaint themselves with mission, procedures, and rules prescribed in this regulation and the USAIC/FB AVN SOP, the Fort Benning Air Letter, Local NOTAMS, and the Range Control Range Restrictions. All aircraft will use Skywatch frequency 249.500/38.60 FM for advisories when operating within the reservation boundaries. For those flights over areas not included within R3002, but still on the reservation (west of Dixie Road) such as York Field, Peden Field, Stewart-Watson or Eubanks, coordination with Lawson Operations will be accomplished a minimum of 24 hours in advance of the proposed activity. Telephone Lawson Army Airfield Operations (LSF), 545-3524/2471 for briefing.

6-2. Operation of armed Army aircraft. Operation of armed Army aircraft will be in accordance with USAIC and FB Aviation SOP, or approved firing exercises established as outlined in chapter 3. The following actions will be taken to assure safety during live fire exercises.

a. The Officer in Charge (OIC) will control the range firing from an aircraft or on the ground. He must have radio contact with all aircraft conducting firing and be in a position to maintain visual contact. He must also maintain radio communication with Range Control at all times (see chapter 7).

b. All arming/disarming will only be from points approved by Range Control, DPTM.

c. All firing will be conducted in an approved firing lane between the Start Fire Line (SFL) and the Cease Fire Line (CFL). Easily identifiable markers will be placed on the ground or terrain features identified to indicate limits of the SFL and CFL. The placing of these markers and required roadblocks/road guards is the responsibility of the OIC.

d. All firing will be conducted under the direct supervision of the pilot in command after being cleared to fire by the OIC.

e. During door-gunner firing there will be positive communication between the pilot and/or an OIC to ensure that no firing is conducted when the aircraft is off course or in an altitude/position that could cause impacts outside the designated area. The OIC will alert the Land Management Branch (544-6304/6206) prior to firing; experience has shown that this type training generally results in woodland/grass fires.

6-3. Operation of Air Force high performance aircraft. Only those units operating under a current Interservice Support Agreement (ISA) will be allowed to operate in the R3002 restricted airspace. All procedures will be in accordance with the current ISA. General provisions are listed below.

a. Requests for ranges or requests to establish training exercises, will be accompanied by 1:50,000 map showing all flight patterns and altitudes to be flown in support of range or problem firing, orbit areas, impact areas, penetration, departure routes and jettison areas. The request will include start and end points of the proposed firing positions.

b. Firing, impact and jettison area(s) will be marked, on the ground, and access will be controlled by guards and roadblocks. The guards will be thoroughly briefed on munitions to be expended and hazards involved.

c. Aircraft must have communication with Ground Terminal Attack Control (GTAC) when making firing passes and/or bombing runs in impact areas or jettison areas. No "live" firing pass will be made without definite clearance by GTAC. During dry runs, ground control and/or airborne GTAC must maintain radio communication with Range Control on the Range Control primary net. If the primary net is unavailable, Skywatch or Tampa Nester may be used. (Freq 249.500, call sign, "Skywatch" or Freq 38.60, call sign "Tampa Nester").

d. All duds larger than 2.75 rocket resulting from aircraft operations will be marked and reported by approximate coordinates so that destruction can be effected by EOD personnel.

e. During operation of AC-130 gunship in R3002 an Army Ground Safety Observer (GSO) or Ground Terminal Attack Control (GTAC) must be present and in position to observe firing. AC-130s under the control of an Army GSO are not required to comply with the provisions of the current 9th AF ISA; however, the GSO and aircrew must comply with paragraph 6-3a through 6-3e above.

f. Hung ordnance procedures. If the procedures listed in the ISA cannot be accomplished, the following applies:

(1) After all attempts have been exhausted to drop on R3002 designated areas, aircraft with hung ordnance will contact the LSF Control Tower/Airfield Advisory Service (AAS) when the tower is closed.

(2) Lawson Control Tower/AAS shall handle situations involving hung ordnance as emergency landings and ensure that over flight of populated areas is avoided to the maximum extent.

(3) After landing with hung ordnance the aircraft shall be parked in one of the designated hazardous parking areas.

6-4. Use of Dekkar LZ, Lae LZ/DZ and Fryar DZ. The use of Dekkar LZ, Lae LZ/DZ and Fryar DZ requires special procedures due to their proximity to Lawson Army Airfield and its runway arrival/departure paths. USAIC Regulation 350-3 governs use of these areas for paratroop activities. The following additional guidance applies:

a. Description: Dekkar LZ and Fryar DZ lie within that part of R-3002 for which Lawson Control Tower has been designated as the controlling agency by the Federal Aviation Administration (FAA). Each is further described as follows:

(1) Dekkar LZ is a dirt landing strip located at coordinates 84 56'W, 32 16'N (grid 934732). It underlies the runway 33 final approach course and its northern limit is 3NM from the threshold of runway 33. The strip is 4152 feet long with 300 feet of overrun at each end and is oriented 180/360.

(2) Fryar DZ is an open field whose center is located 3 1/2NM southeast of Lawson Field and one mile west of the runway 33 final approach course.

(3) Lae Field is an unimproved landing field located approximately 5 NM south-southeast of KLSF. It is approximately 1500 meters wide and 2700 meters long, oriented 150° or 330° magnetic. Molnar Range is located in the vicinity of Lae.

b. Use limitations: Use of Dekkar LZ, Lae LZ/DZ and Fryar DZ shall be normally limited to the following:

(1) Dekkar LZ can be used for assault landings by fixed-wing and rotary-wing aircraft or for night vision systems (NVS) training by rotary-wing aircraft. A ground party at Dekkar LZ in accordance with the following must control assault landings by fixed-wing aircraft:

(a) Air Force aircraft will be controlled by an USAF combat control team (CCT).

(b) Army aircraft will be controlled by a CCT or qualified pathfinder (PFDR).

(2) Fryar DZ can be used for personnel, equipment, and bundle drops by fixed wing aircraft and for assault landings by rotary-wing aircraft.

(3) Lae Field may be used for rotary wing assault landings.

c. Traffic patterns and routes:

(1) Routes into and out of Dekkar landing zone for fixed-wing aircraft should remain within the Lawson Class D, E, and R3002 airspace. Routes for rotary-wing aircraft will be at the discretion of the aircrew, but must remain clear of the runway 33 final approach course, unless otherwise approved by Lawson Tower. Traffic patterns shall be flown at 1200' MSL (mean sea level) (700' MSL for rotary-wing aircraft). Normally, fixed-wing aircraft shall arrive and depart to the south; however, when dictated by weather or other conditions, departure to the north can be authorized provided each instance is individually approved by Lawson Tower.

(2) Fixed-wing aircraft operating at Fryar DZ shall conform to the pattern and routing prescribed by USAIC Regulation 350-3. Rotary-wing aircraft operating at Fryar DZ must remain within the Fryar DZ airspace and well clear of the runway 33 final approach area.

(3) When aircraft conduct operations at Dekkar LZ under the control of CCT/PFDR, coordinate all aviation related operations with Lawson Tower or Lawson Base Operations.

d. Communications:

(1) When a CCT/PFDR is used, communication between participating aircraft and CCT/PFDR will be on a previously arranged discrete frequency. Communication between the CCT/PFDR and Lawson Tower shall be continuous, on a common radio frequency. Participating aircraft shall monitor Lawson Tower frequency while operating within the Dekkar/Fryar combined area.

(2) When a CCT/PFDR is not used, participating aircraft shall maintain continuous communication with Lawson Tower.

e. Weather: See USAIC/FB AVN SOP, Fort Benning Aviation Flight Procedures.

f. Ground support: The using unit is responsible for effecting necessary coordination to ensure that appropriate ground support (CCT, LZSO/NCO, crash trucks, ambulance, and so forth) is available.

g. Aircrew briefing: The using unit is responsible for briefing aircrews on the requirements of this regulation and USAIC Regulation 350-3. In addition to traffic patterns, routes, communications, and weather requirements, the briefing shall include the following:

(1) Indicate the intended mission on the flight plan.

(2) Advise Lawson Tower or CCT/PFDR on initial contact of the intended mission.

(3) Maintain VMC (visual meteorological conditions) at all times. If unable, advise CCT/PFDR or Lawson Tower and contact Columbus Approach Control (285.525 UHF or 126.025 VHF) for clearance.

(4) In the event of an emergency situation, advise CCT/PFDR, if appropriate, and request assistance from Lawson Tower.

(5) If radio communication with ground support personnel is lost, attempt to contact Lawson Tower on **269.525 UHF or 126.2 VHF**. If unable to contact Lawson Tower, follow standard lost communication procedures.

h. After hours operations: When operations at Dekkar LZ or Fryar DZ will be conducted at a time when Lawson Tower will be closed, Airfield Operations will perform all functions and requirements assigned to Lawson Tower except that services provided to aircraft will be advisory in nature. Lawson Base Operations shall provide advisory notice of flight operations at Dekkar to affected non-participating aircraft.

i. LZ/DZ maintenance: The CCT and LZSO/NCO are responsible for inspecting the LZ/DZ and informing DPTM Current Operations Division of any needed maintenance.

j. Deviations: Deviations from the procedures contained in this chapter will be allowed only after coordination between all parties concerned which clearly and completely defines responsibilities in each case. Requests for deviations shall be made in accordance with the following:

(1) Requests to deviate from the use limitations specified in paragraph 6-4b must be submitted in writing to DPTM Operations, Plans and Mobilization Division at least 60 days in advance.

(2) Requests to deviate from traffic patterns, routes, or air traffic control communications requirements shall be coordinated with Lawson Tower or Lawson Base Operations.

(3) Requests to deviate from other requirements of this regulation shall be submitted in writing to DPTM Operations, Plans and Mobilization Division at least 30 days in advance.

Chapter 7

Communication Requirements

7-1. General. Units/activities using live fire ranges and training areas will establish and maintain continuous radio communications with Range Control at all times. Units/activities are required to have a commercial porta-mobile radio capable of communicating with Range Control and MEDEVAC when operating live fire ranges. In the event of a reported emergency, Range Control will initiate a net call on the primary operational net to all affected stations with necessary instructions. Units will not respond to emergency calls unless specifically called by Range Control; in these cases, ranges are required to acknowledge information/instructions issued.

a. Range Control Radio Control Center.

(1) The primary Range Control operational net control call sign is RANGE CONTROL. This radio net employs the commercial porta-mobile radio and is in operation 24 hours a day. Sufficient quantities of commercial porta-mobile radios are issued to major units/activities with limited backup stock maintained by Range Control Supply for issue to other users.

(2) The military FM capable net, frequency 38.60, call sign TAMPA NESTER used as a backup to the commercial porta-mobile radios.

(3) In addition to the above radio nets, Range Control Operations has the capability of monitoring and transmitting on the following radio nets (Not to be used by units as a training net):

(a) MEDEVAC control net.

(b) EMS control.

(c) Skywatch net.

(d) E-911.

(e) MP Control.

b. Telephones: This system includes installed telephones, cellular telephones and telephone MAG drops to supplement Range Control control nets in the event of an emergency.

(1) Units using field MAG telephone drops must contact the USAIS Telephone Branch (545-1557) 10 days prior to scheduled use for assignment of extension numbers.

(2) Range OIC/NCOIC will report the location of damaged or inoperative telephones to DOIM, 545-3533.

7-2. Communication requirements/procedures:

a. Live fire ranges:

(1) Units/activities are required to have a commercial porta-mobile radio as the primary means of radio communications while operating live fire ranges.

(2) Units and activities supported with radios by Range Division will receipt for the equipment two days prior to the scheduled event. For weekend training, units and activities will receipt for equipment by 1400 Thursday prior to the event.

(3) Prior to any live fire exercise, the OIC, Safety Officer, or his representative will check into the primary net, request an opening code, provide name/grade of OIC and number of personnel to be trained. The OIC, Safety officer, or his representative throughout the period of firing will maintain listening silence. Upon completion of firing, the unit/activity will obtain a closing code from Range Control indicating that the range is no longer in a live fire status. Units firing after 2400 must obtain a closing code and a new opening code at that time.

(4) Units/activities will identify themselves using either

(a) The name of the range used;

(b) Artillery firing point;

(c) Problem number; or

(d) Unit designation. Units using multiple firing points will be required to maintain communication with Range Control through the fire direction center (FDC) controlling the firing points.

(5) Range OIC/Safety Officer will immediately place firing range on check fire upon loss of communication and remain on check fire until communication is reestablished.

b. Demolition firing: The premature detonation of electric blasting caps by induced current from radio frequency signals is possible. Therefore, the following procedures will be adhered to at the locations specified:

(1) Terry Demolition range: The procedures in paragraph 7-2a, and the Terry Demolition Range SOP, will be followed while operating Terry Demolition Range. Two radios or field telephones will be maintained on the range during firing to be used in closing and opening the entrance road. Radios will not be used within 50 meters of electrical caps.

(2) Infiltration course (Young Range): Radios will not be used while the arming of demolition pits is in progress. Radios may be used, as required, during all other periods the range is in use.

(3) Demolition operations at other locations: Adhere to table 2-1, FM 5-250, when using a radio to comply with paragraph 7-2a of this regulation.

c. Other training: When occupying any training area/site, (to include drop zones in the cantonment area), in a non-live fire status, all units/activities will establish and maintain continuous communication with Range Control, by commercial portable radio. After establishing communication, the unit/activity will request an opening code to begin training. Units training beyond 2400 hours will obtain a closing code and a new opening code daily, prior to 2400 hours each training day. The following information will be reported when opening training areas:

(1) Training area to be occupied.

(2) Unit/activities.

(3) Name of OIC.

(4) Number of troops to train.

d. Telephone communications can be established by calling 545-3474/3479/1602.

Chapter 8

Safety and Service Support

8-1. Range supplies and equipment. The Range Control Supply, building 2901, 545-3132, is responsible for the procurement, storage, and issue of standard supplies used in range operations and other equipment necessary for safe and efficient operation of ranges.

a. Table 8-1 of this regulation specifies range supplies issued by Range Control, DPTM.

b. Security and safeguarding of equipment: Target and storage buildings located on ranges and training areas are not considered secure. Telephones, radios, tools and equipment will not be stored unless properly protected in these buildings. Ammunition and explosives will not be stored in any building that is not properly sited at safe explosives quantity distance, secured with proper locks and hasps, and not stored with any incompatible items that would increase the explosive hazard (such as, paint, solvent, and so forth).

Nonexpendable equipment, which is hand receipted from Range Control, must be constantly accounted for by the hand receipt holder. In the event of loss or damage to nonexpendable property, the following procedures will be adhered to:

(1) The hand receipt holder or the person to whom the item was sub-hand receipted will prepare DA Form 4697, Department of Army Report of Survey, in 6 copies. Care will be taken to adhere to the guidelines as set forth in AR 735-5.

(2) All reports of survey are to be HAND CARRIED by the initiator to Range Control Supply for review by and to obtain the signature of the Range Control Supply Officer. Range Control Supply will handle final coordination on reports of survey. Findings, when obtained, will be forwarded to the hand receipt holder by the Range Control Supply Officer.

Table 8-1. Range supplies

Targets, target cloth, paste, pasters.
Target mechanism kill switches.
Posters, spotters, and marking disks.
Red range safety flags.
Hard targets (tanks, heavy vehicles, etc.) for heavy weapons.
NOTE: Loading and transportation of hard targets is the responsibility of the requesting unit.

8-2. Communications equipment. Request for issue of communications equipment must be submitted with an approved RFMSS scheduling document that indicates training site to be used. Commercial FM, two-way radios issued by the Range Control Supply will at all times, in terms of composite and components, be considered nonexpendable. Lost or damaged communications equipment must be surveyed before replacement or repair by civilian contractors can be effected. These radios are considered sensitive items that are susceptible to pilferage. Therefore, when the radios are not in possession of the user, they will be maintained in a secure building. Range towers and buildings located on individual firing ranges or training areas are not considered secure. Range Supply is designated central turn-in point for radio maintenance by hand receipt holder.

8-3. Range modification. Directorate of Public Works (DPW) maintenance responsibilities: The DFEL is responsible for the construction, modification, and maintenance of range facilities. All requests for maintenance, repair, modification, relocation, demolition and new construction of ranges and problem areas will be in accordance with provisions of USAIC Regulation 420-8. Units and training personnel will not modify, alter, demolish or construct facilities on a range or problem/training area without first submitting DA Form 4283, through Range Control, DPTM, and obtaining DPW approval to accomplish the work.

8-4. Medical support.

a. Medical support for training as prescribed in USAIC Regulation 40-2 is divided into on-site and area medical support as defined below:

(1) On-site medical support: Medical support provided by locating medical personnel and equipment at the activity or event site. Support normally consists of an ambulance, driver, and aid man. For medical support for DZ operations see USAIC Regulation 350-3.

(2) Area medical support: Medical evacuation support provided by helicopters from designated units. Support normally for life and limb emergencies.

b. Those activities requiring on-site medical support are as follows:

- (1) Basic Airborne training.
- (2) Basic Ranger training.
- (3) Demolitions in accordance with USAIC Regulation 40-2.
- (4) Live fire maneuver exercises.
- (5) Hand grenade ranges (live).
- (6) Grenade Launcher when firing high explosives.
- (7) Operations in and over water.
- (8) Infiltration course.
- (9) Fire and Maneuver Exercises.
- (10) Mechanized Leader Course FTX.

c. Air Evacuation: The primary method to obtain helicopter air ambulance evacuation on the Fort Benning installation is by contacting E-911 on the issued hand-held radio. The alternate methods of contacting Range Control are by telephone, 545-3474/3479 or Military FM 38.60. If unable to contact Range Control, contact "MEDEVAC CONTROL," 498th Medical Company (AA), by calling 545-5311/3288 or Military FM frequency 49.65. Range Control will respond to MEDEVAC requests regardless of format. All responders will be prepared to react to the 9-line medical evacuation format or obtain necessary information by questioning the caller. The objective is to initiate and coordinate the MEDEVAC in the most expeditious manner. Range Control also has a requirement to obtain and report the names of injured, but this will be done after necessary actions are completed. The format for requesting MEDEVAC is the nine-line request as listed below:

Line 1: LOCATION:
Line 2: CALL SIGN:
Line 3: NUMBER OF PATIENTS:
Line 4: SPECIAL EQUIPMENT:
Line 5: TYPE OF PATIENTS:
Line 6: DESCRIPTION OF INJURIES:
Line 7: LANDING ZONE MARKING:
Line 8: NATIONALITY/STATUS:
Line 9: TERRAIN DESCRIPTION/WEATHER:

d. Procedures for directing aircraft:

(1) Vehicle lights or strobe lights used for identification during night evacuation should be directed into the wind to allow the aircraft to approach over the top of the vehicle.

(2) Smoke, when used, should be discharged as soon as the aircraft is within sight. Smoke should be on the downwind portion of the clearing to allow the aircraft to approach and land clear of the smoke. Smoke is not a requirement for MEDEVAC.

(3) Panels, when used, should be securely fastened to the ground approximately 5 to 10 meters upwind of the actual landing area. This must be accomplished to prevent drawing of the panels into the rotor blades.

(4) Chem-Lights: Attach chem-light to three feet of string and spin in circle when aircraft can be heard.

(5) Ensure that pickup site is clear of small arms and artillery fire.

8-5. Roadblocks. Roadblocks in need of repair or which cannot be employed for the purpose for which installed will be reported to Range Control via radio upon discovery. All personnel participating in activities on the Fort Benning reservation are urged to submit recommendations for additional roadblock sites, which will contribute to increased range/terrain safety. (For roadblock locations, see table 8-2).

8-6. Objects affecting navigable airspace within reservation boundaries:

a. Any construction or alteration, including appurtenances, above the natural growth or terrain above ground level at its site requires each person proposing any kind of construction or alteration to give adequate notice to the Fort Benning Range Control and AT&A officer. The notice specifies the locations and dimensions of the construction or alteration for which notice is required. It also requires supplemental notices 48 hours before the start and upon the completion of certain construction or alteration as required by the Fort Benning Range Control or AT&A officer.

b. Construction or alteration not requiring notice.

(1) Any object that would be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town, or settlement where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation.

(2) Any antenna structure of 20 feet or less in height except one that would increase the height of another antenna structure.

c. Lighting requirements. Due to aircraft flights conducted at night within the Fort Benning Reservation boundaries at terrain flight altitude designated construction or alteration (specifically towers) of a permanent or temporary nature in any designated Range training area(s) must be lighted.

Table 8-2. Roadblock Locations

Block	GRID	LOCATION	TYPE
A-1	913 793	Unnamed trail NE of Sightseeing Rd approx. 900 meters So. of Dixie Rd. Permanently blocked.	Cable
A-2	910 783	Off Sightseeing Rd on unnamed trail opposite of entrance to LRC. Limited access.	Gate
A-4	924 765	Off sunshine road 600 meters west of Grandstaff range	Gate
A-5	935 763	Entrance to Grandstaff Rng. Limited access.	Gate
A-6	938 763	Off Sunshine Rd west of Oswichee Creek. Permanently blocked.	Cable /berm
A-8	969 740	Off Sunshine Rd approx. 75 meters. Limited access.	Gate
A-9	989724	20 meters off Sunshine Rd on unnamed trail 200 meters west of Shell Creek	Gate
A-10	018 730	50 meters North off Sunshine Rd entrance to Flint Range. Limited access.	Gate
A-11	020 731	100 meters North of Sunshine Rd on Lumpkin Trail. Limited Access.	Gate
A-12	032 742	50 meters west of Jamestown on Garnsey Rd. Limited access.	Gate
A-15	021 799	Entrance to Buchanan Range. General Purpose.	Gate
A-18	992 827	150 meters south of First Div Rd on Buckeye Rd, 50 meters east of entrance to Duke Range. Limited access.	Gate
A-19	973 822	700 meters So. of Eighth Div Rd. Entrance to Patton Range. General Purpose.	Gate
A-20	974 827	300 meters So. of 1st Div Rd entrance to Dianda Range. General Purpose.	Gate
A-22	015 817	North end of Brinson Range. General Purpose.	Cable
A-23	024 744	On unnamed trail north of road entering Garnsey Range. General Purpose.	Cable
A-23A	986 756	Across Lumpkin Trail down range on Griswold Range. Limited access.	Gate
A-30	026 758	On firebreak dirt trail intersection leading south from Brann Range to Kyle Ambush site. Limited access.	Gate
A-31	020 745	Located on firebreak 700 meters south of Kyle Ambush site at Garnsey Range.	Cable
A-32	989-724	Entrance to Kunzig Range. Limited access.	Gate
A-33	973 734	Entrance to Griswold Range. Limited access.	Gate
A-34	948 758	Entrance to Minter Hill. Limited access.	Gate

D-3	111 910	Across Reseca Rd 25 meters south-east of Reseca and Underwood intersection. Limited access.	Gate
D-4	132 882	300 meters No. of Underwood Rd on Plymouth Rd. Limited access.	Gate
K-2	163 883	50 meters north of Buena Vista Rd on Box Springs Rd. Limited access.	Gate
K-3	152 894	150 meters north of intersection of Buena Vista Rd on Concord Trail. Entrance to Ferguson Range. (General Purpose)	Gate
K-4	145 901	50 meters north of Buena Vista Rd at entrance to Hartell Bunkers	Gate
K-5	118 919	Across Shamanski Rd at the intersection of Shamanski Buena Vista Rds.	Gate
K-7	130 915	Across unnamed trail, 10 meters North of Buena Vista Rd.	Gate
K-10	118 920	Across Buena vista Rd. at K-5 roadblock. Road guard location.	Gate
K-11	110 920	Permanently closed barrier across Shamanski Rd at Buena Vista Rd	Berm
K-13	109 937	10 meters north of Bullseye Rd on Moore Rd. Limited access.	Gate
K-14	113 998	10 meters south of Lorraine Rd on Moore Rd. Limited access.	Gate
K-15	114 999	10 meters east of Moore Rd on range course road leading out of Ruth Range. General purpose.	Gate
K-16	192 003	100 meters west of inter section of Rinehart Box Springs Rds. General purpose.	Gate
K-17	117 011	30 meters northeast of covered mess area (Ruth Range) on unnamed Trail	Cable
K-18	122 031	Permanently closed barrier across Moore RD at reservation boundary	Berm
K-19	121 022	On unnamed trail 1000 meters north of Ruth Range	Cable
K-20	141 024	On unnamed trail of North Boundary Trail along railroad tracks 400 Meters east of Cox Creek Ford	Cable
K-24	215968	Permanently Closed	Barrier
K-25	180 912	Permanently closed roadblock 10 meters west of Box Springs Rd. across unnamed Trail leading to Shiloh Trail	Cable
K-26	200 966	Across Turrentine Rd west of intersection of Turrentine and Boundary Rds.	Gate
K-28	191 833	Across Turrentine Rd. west of the intersection of Turrentine and Boundary Rds.	Gate
K-30	193 914	On Whitson RD west of the intersection of Whitson and Cactus Rds.	Cable
K-32	192 915	Across Shamanski Rd west of intersection of Shamanski Cactus Rds. Limited access.	Gate
K-33	173 907	Across Spafford Rd west of intersection of Spafford Box Springs Rd. Permanently blocked.	Cable
K-34	136 932	Permanently closed barrier Buzancy Trail.	Cable
K-36	162 883	On Buena Vista Rd west of intersection of Box Springs Buena Vista Rds. (Road guard location.)	Gate
K-39	201 949	On unnamed trail and reservation boundary. Permanently blocked.	Cable

Table 8-2. Roadblock Locations (continued)

Block	GRID	LOCATION	TYPE
K-40	173 909	On Box Springs Rd at Pine Knot Creek. Limited access.	Gate
K-42	193 948	800 meters north of Box Springs Rd Cactus Rd intersection on Box Springs Rd. Limited access	Gate
M-1	009 910	Off Wildcat Rd, 10 meters east on Steam Mill Rd. Limited access.	Gate
M-2	020 936	Off Buena Vista Rd 100 meters at west end of M-21 on Massey Road. Limited access.	Gate
M-3	046 893	Off 2d Armored Div. Rd. 20 meters north on Stenay Rd. Limited access.	Gate
M-4	046 935	Junction of Buena Vista Red Arrow Rds. Limited access.	Gate
M-5	045 933	Across unnamed trail 100 meters southwest of Red Arrow Rd. Limited access.	Gate
M-6	059 927	Junction of Red Arrow and Midwest Road. Limited access.	Gate
M-7	052 923	Across Steam Mill Rd 300 meters south of Red Arrow Rd. Limited access.	Gate

Chapter 9 Training and Accident/Incident Reports

9-1. Dud report. The 789th Ordnance Detachment (EOD) and the Range Control monthly reports of incidents will comprise the record of the dud disposal for this headquarters. Upon completion of firing, any "dud-producing" weapons in a nondesignated dud area, the OIC will be responsible for submitting a written report to Range Control that a search has been conducted and all known or suspected duds have been reported or destroyed.

9-2. Weapons/ammunition malfunction report.

a. During normal duty hours: When a malfunction is experienced, the Officer in Charge or Range Safety Officer will suspend all firing and immediately notify Range Control, DPTM, via radio. **RETAIN THE WEAPONS AND ALL COMPONENTS AND AMMUNITION INVOLVED IN PLACE.** An investigation is required and will be conducted by DOL Maintenance Division Inspector (545-2279) and DOL QASAS/Ammunition Inspector (544-7490/7489/6015). Range Control will make the appropriate notifications. When malfunctions do not involve weapons (such as, hand grenades, mines, demolition charges, and so forth), DOL Maintenance Division need not be notified. The OIC will take necessary steps to prevent tampering with the material involved, and items will not be removed from the range until investigated. Once the investigation is completed, the QASAS/Ammunition Inspector will declare the ammunition safe or unsafe for further use. If the ammunition is safe for use, firing can resume including use with all weapons except the one that has malfunctioned. Disposition of the malfunction weapon will be determined by DOL Maintenance Division Inspector. If the ammunition is unsafe for use, the unit will be directed by the QASAS/Ammunition Inspector as to its disposition. Following any malfunction investigation, a detailed written report must be made. This report is submitted on a DA Form 4379-R, Ammunition Malfunction Report, for all conventional ammunition items; and a DA Form 4379-1-R, Missile and Rocket Malfunction Report, for all missiles and certain large rocket. AR 75-1 gives instructions on completing the forms. When the DOL QASAS/Ammunition Inspector conducts the malfunction investigation, it is their responsibility to complete the report. If the DOL QASAS/Ammunition Inspector is not present to conduct the investigation, the OIC must complete the report on the applicable form. All defects (other than operating ones) or nonstandard conditions noted with the ammunition will be reported. This report will be submitted within two workdays after the malfunction to DOL, Supply and Services Division, ATTN: Ammunition Supply Point/Surveillance Office. If a weapon or weapon system is involved in a malfunction and a DOL Maintenance Division representative was not present, a copy of the report will be submitted to DOL Maintenance Division, QA Branch. If any doubt exists as

to whether a defect or condition is to be reported, contact the Chief, Maintenance Division (545-2279) or the installation QASAS/Ammunition Inspector (544-7490/7489/6015). A copy of all reports generated by a range OIC will also be provided to the Fort Benning Safety Office and the Chief, Range Control, DPTM.

b. After Duty hours: The same requirements of paragraph 9-2a apply. Notification is made through the USAIC FOD/SDO, phone 545-2218/3214.

9-3. Accident report.

a. When any incident occurs resulting in an injury, an immediate report will be made by the OIC/RSO of the unit training to the Range Control, Range Control, DPTM, via radio or telephone, 545-3474/3479. In the event Range Control is closed, OIC/RSO will contact USAIC Staff Duty Officer, telephone 545-2218/3214.

b. The following information will be furnished by OIC/RSO to Range Control, DPTM.

- (1) Designation of unit.
- (2) Range and location.
- (3) Type of weapon involved.
- (4) Type of ammunition involved.
- (5) Brief summary of what happened.
- (6) Personnel injuries and extent.
- (7) Full name, social security number, rank and unit of injured personnel.
- (8) Extent of property damage.
- (9) Intentions regarding an AR 15-6 investigation.

Chapter 10 Integrated Training Area Management (ITAM) Program

10-1. General. The ITAM program provides a management and decision-making process to integrate Army training and other mission requirements for land use with sound natural resource management of land. The overall goal of the ITAM program is to achieve optimum, sustainable use of training lands to meet current needs without compromising the integrity of the environment for future generations.

10-2. Responsibility. The Proponency for the ITAM Program is assigned to the office of the Deputy Chief of Staff for Operations and Plans, Headquarters, Department of the Army, with specific responsibility residing in the Training Directorate. Proponency for the installation ITAM program is assigned to the Directorate of Plans, Training, and Mobilization (DPTM) with responsibility for the program assigned to the Range Control.

10-3. Goal. In conjunction with other training and environmental programs, the Army will achieve optimum, sustainable use of its training lands by implementing a uniform program that includes inventorying and monitoring land condition, integrating training requirements with land capacity, providing for land rehabilitation and maintenance, and educating land users to minimize adverse impacts.

10-4. Program Objectives

- a. Sustain training lands to ensure their availability to support Total Army training and mission requirements.
- b. Establish a uniform, consistent program across the Total Army, with standard procedures reflecting sound training and land management principles.
- c. Establish an inventory of natural and cultural resource conditions to support the training mission.
- d. Determine the capacity of the land to sustain training throughout diagnostic methods, models and tools to support assignment of the optimum type, frequency, duration and intensity of training of which can be conducted on a given parcel, and identify the risk and cost associated with exceeding that capacity.
- e. Allocate training land users, including the type, frequency, duration and intensity of use, based on the capacity of the land to sustain those uses.
- f. Monitor resource conditions and determine trends in those conditions.
- g. Stabilize and sustain natural resource conditions by changing type, frequency, duration or intensity of use, or by applying adjusted levels of repair and maintenance.
- h. Plan, program work, and execute both repair and maintenance projects, and reconfiguration and redesign of training areas to support the sustainment of land.

i. Educate land users to prevent avoidable damage to the land and minimize unavoidable damage resulting from training and other mission activities.

10-5. Program Components. The ITAM Program consists of four components:

a. Land Condition Trend Analysis (LCTA). LCTA is a methodology for inventorying and monitoring Army land resources. It incorporates a relational database and Geographic Information System (GIS) used to support land use planning decision processes. LCTA collects physical and land conditions to training activities. This data is intended to provide information to effectively manage land use and natural resources.

b. Training Requirements Integration (TRI). The TRI component of ITAM integrates the installation's training requirements for land use derived from the Range and Training Land Program (RTLTP), range operations and training land management process and the installation's training readiness requirements, with the natural resource conditions of the installation's lands derived from the LCTA and other NRM processes. The RTLTP provides the means by which installations identify training land and range requirements based on doctrine. RTLTP uses the installation's assigned unit's Mission Essential Task List (METL) and Combined Arms Training Strategy (CATS) to determine land and range requirements. RTLTP also provides procedures by which range and training lands are managed on a day-to-day basis to support unit training requirements. Training requirements include events that must be scheduled and allocated to land parcels. Training requirements also include siting of training facilities (e.g., ranges), which are needed to conduct and support training. Through TRI, the installation operations/training staff, supported by the natural resource management/environmental staff, exercises a decision-making process leading to identification of options for allocating specific training requirements to specific land parcels. TRI seeks to continuously balance training requirements with natural resource conditions by selecting options that will sustain use of lands indefinitely to support training readiness.

c. Land Rehabilitation and Maintenance (LRAM) LRAM includes programming, planning, designing, and executing land rehabilitation, maintenance, and reconfiguration projects based on requirements and priorities identified in the TRI component of ITAM.

(1) LRAM uses best management practices (such as, professionally accepted, cost effective practices) for design and execution of projects affecting all environmental media to ensure that the rehabilitation, repair, and maintenance results are commensurate with the resources applied.

(2) LRAM includes training area redesign and reconfiguration. The need for training area redesign results from recurring use of specific parcels for specific training activities, and from an understanding of how the mission relates to the natural environment. Redesigning and reconfiguring a land parcel to cause its training use to change helps sustain overall condition of the installation's lands. Redesign also responds to requirements derived from force modernization, unit restructuring and realignment, and changing training strategies and missions that affect the installation.

(3) LRAM includes long -term land maintenance plans coordinated with other real property management programs. Since the installation supports multiple missions, the optimum plan for managing and developing all installation real property requires LRAM to be coordinated with the overall installation Real Property Management (RPMP). Through this coordinated effort, the installation commander ensures all real property assets are maintained and available to support the installation's multiple missions. The Army also is able to prioritize its management and investments to ensure the long-term military viability of its installations.

d. Environmental Awareness. Environmental Awareness improves land user understanding of the impacts of their mission, mission training, and other activities on the environment. The Environmental Awareness component of ITAM applies to: tactical units, leaders, and Soldiers, who are assigned to or using the installation; tenant activities; installation staff; including civilian employees; and other installation training land users, including local populations, family members, and so forth. Environmental Awareness is the ITAM component that will be most visible to units and Soldiers in the field. Command emphasis is necessary to convey the seriousness of environmental stewardship, as well as to provide focus for installation-specific issues. Command emphasis also conveys the priority and resolve needed to sustain the training land resource base, and ensure compliance with laws and regulations. Installations public affairs offices help to proactively convey their command program to both military and civilian audiences. Units coordinate with installation staff, and ensure that unit personnel are properly oriented on relevant environmental restrictions, rules, procedures and behavior.

Appendix A References

Section I Related Publications

AR 15-6
Procedures for Investigating Officers and Boards of Officers

AR 75-1
Malfunctions Involving Ammunition & Explosives (RCS CSGLD-1961 (MI)

AR 385-62
Regulations for Firing Guided Missiles and Heavy Rockets for Training, Target Practice and Combat

AR 385-63
Policies and Procedures for Firing Ammunition for Training, Target Practice and Combat

DA Pamphlet 385-63
Range Safety

FM 5-250
Explosives and Demolitions

USAIC Regulation 40-2
Field Medical Support and Routine/Emergency Medical Evacuation

USAIC Regulation 350-3
Military Parachuting on Fort Benning and Fort Benning Satellite Installations

USAIC Regulation 415-32
Engineer Troop Construction

USAIC Regulation 420-1, Management of Operation and Maintenance Army (OMA) Maintenance & Repair Minor Construction Expenditures

USAIC Regulation 420-7
Turf Maintenance

USAIC Regulation 420-8
Construction, Maintenance, and Repair of Real Property

USAIC Regulation 420-22
Self-Help/U-Do-It Program

USAIC Regulation 710-3
Ammunition Supply Procedures

Section II Prescribed Forms

FB Form 210-4-1-R
Range Safety/Operation Checklist (Prescribed in paragraph 5-27d)

FB Form 210-4-2-R
Artillery/Mortar Safety Record (Prescribed in paragraph 3-2c(1)(c))

FB Form 210-4-3-R
Firing/Nonfiring Data (Prescribed in paragraphs 2-8c(3); 2-8b(3); 3-2b(4); 3-2c(1); 3-2c(2); 5-25c(1); 5-26(d)

FB Form 210-4-4-R
Environmental Checklist (Prescribed in paragraph 5-17c)

Section III Referenced forms

DA Form 581
Request for Issue and Turn-in of Ammunition
(Referenced in paragraph 5-4a)

DA Form 1594
Daily Staff Journal or Duty Officer's Log
(Referenced in paragraph 5-4b)

DA Form 2203-R
Demolition Reconnaissance Record (Referenced in paragraph 5-4a)

DA Form 4283
Facilities Engineering Work Request (Referenced in paragraphs 2-2c; 3-2d(3); 5-23c(5); 5-23e(1); 5-23e(3)(b); 8-3)

DA Form 4379-R
Ammunition Malfunction Report (Referenced in paragraph 9-2a)

DA Form 4379-1-R
Missiles and Rockets Malfunctions Report
(Referenced in paragraph 9-2a)

DA Form 4697
Department of Army Report of Survey
(Referenced in paragraph 8-1b(1))

DA Form 5692-R
Ammunition Consumption Certificate
(Referenced in paragraph 5-4a)

FB (RCO) Form 3
Range Control Safety Briefing Identification Card
(Referenced in paragraph 2-5n)

FB Form 46-R, Risk Management Worksheet
(Referenced in paragraph 5-26b)

FB Form 144-R
Record of Environmental Consideration
(Referenced in paragraph 3-2(b)(4), (5) and paragraph 5-17(e), (2)

Appendix B Range, Training Area, and Training Apparatus Maintenance

B-1 History.

During Fiscal Year 1992, budgetary constraints dictated the release of 64 Range Control personnel who were providing "roll on – roll off" scheduling and operation of ranges on the installation. The Command Group, after a comprehensive staffing effort and concurrence of the Major Subordinate Commands (MSCs), directed assignment of ranges, on a sponsorship basis, to the MSCs. The assignments were closely tied to the units using the range the majority of the time. Units were given the mission of Organizational Maintenance and provided maintenance equipment, to include large tractors with grass cutting attachments, at the time of the range assignment. Units were tasked to provide replacement equipment and budget for items required to maintain and operate the assigned ranges.

B-2. Sponsorship Responsibilities

a. Units are responsible for the Organizational Maintenance and Repair of their assigned ranges, training areas and training apparatus.

(1) Minor repair to structures, such as, re-fastening of loose boards, interior painting, replacement of windowpanes, fastening of hardware, and so Forth.

(2) Vegetation control, such as, bushes obstructing line of fire or causing unsafe conditions.

(3) Maintenance of grounds to include cutting of grass around structures to a distance that the unit tractor/riding mowers can operate, and for clearing all flammable material to 2-meters from structures.

(4) Repair and maintenance of firing limit markers, targets, target frames, and cleaning of target coffins to include removal of dirt around moving target monorails (excluding RETS ranges).

(5) Maintain an adequate supply of targets and target frames on site. Request plastic/paper targets from Range Control. Request construction of target frames and plywood targets used on BFV/Tank ranges from DPW via DA Form 4283 through Range Control.

(6) Correct minor drainage deficiencies to include cleaning of ditches and culverts.

(7) Change out and service M31A1 target lifting devices and hit-sensors.

(8) Perform all required maintenance including, but not limited to, erosion control, frontal protection realignment or replacement and grass cutting on target berms.

(9) Keep latrines policed to include adding deodorant and enzymes when needed.

(a) Concrete Pit Type: For pump-out, call DPW Contract Services, (545-4232/4749).

(b) Field Type: Submit DA Form 4283, Facilities Engineering Work Request, through Range Control Safety/Service Branch to re-place.

b. Units are required to maintain assigned ranges and facilities for the overall efficient use by themselves and others in accordance with USAIC Regulation 420-22 (The Unit Self Help/U-Do-It Program). Unit must have a trained self-help individual with a self-help card issued by DPW. Actions required include, but are not limited to:

(1) Housekeeping: cleaning of assigned facilities, usually accomplished by those personnel or units using the facility. Housekeeping, i.e., cleaning costs are to be absorbed by the using unit on the day of use, and sponsorship unit as required.

(2) Electrical:

- (a) Replace fuses.
- (b) Replace plates for toggle switches and receptacles.
- (c) Replace and install light globes and diffusers.
- (d) Replace burned out light bulbs.

(3) Carpentry:

- (a) Repair or replace Safety Limit Markers.
- (b) Repair or replace lane markers.
- (c) Repair or replace firing point markers.
- (d) Replace broken window glass.
- (e) Repair loose glass panes.
- (f) Repair holes in walls.
- (g) Repair or replace outside steps and handrails.
- (h) Repair or replace door hinges, locks and doorknobs.
- (i) Repair or replace window and door screens.
- (j) Repair or replace door closures.
- (k) Replace doorstops.
- (l) Repair or replace base boards.
- (m) Repair or replace hook and eye for screen doors.
- (n) Replace door springs.
- (o) Install coat hangers.
- (p) Replace acoustical tiles.
- (q) Replace bent 2' and 4' T-Beams.

(4) Plumbing:

- (a) Repair or replace faucets.
- (b) Repair or replace toilet seats.
- (c) Repair or replace shower heads.
- (d) Repair or replace soap holders.
- (e) Repair or replace toilet paper holders.
- (f) Replace heating and air conditioning filters.

(5) Cement:

- (a) Minor repair of broken sidewalks.
- (b) Minor repair of retaining walls.

(6) Painting:

- (a) Paint interior and exterior walls.
- (b) Spot paint buildings.

B-3. Facilities Engineering Construction Maintenance and Repair of Real Property

a. All facilities work orders for Range, Training Areas, or Training Apparatus are to be submitted on DA Form 4283, Facilities Engineer Work Request, through Range Control Safety/Service Branch. Range Control will validate, process and track the work order to completion.

b. Units are not authorized to build, modify, or otherwise make permanent or temporary changes to Ranges, Training Areas or Training Apparatus without prior approval of Range Control, DPTM and DPW - (USAIC Regulations 420-8, Facilities Engineering Construction, Maintenance and Repair of Real Property).

c. All requests for Port-a-let latrine service in support of POI training, require DPTM, Range Control approval. DPTM will return those requests not favorably considered without action, to the submitting units. Units are to submit requests through Range Control Safety/Service Branch, (Building 2904 – Phone: 545-9428 – FAX: 545-1124).

(1) POI Problem Number.

(2) Quantity of Port-a-lets required: (Planning Capacity = 10 male or 6 female per day – 1X week service).

(3) Period of Service requested: (dates needed).

(4) Frequency of cleaning service – (once or twice weekly). Location required – (area name and 6-digit grid coordinates).

(5) List any re-locations.

(6) POC (with approval authority) name, rank, unit, and phone number.

B-4. Maintenance Division, DOL Responsibility for Direct and General Support Maintenance Repair of Equipment

a. All requirements for DS maintenance repair of equipment are to be requested on a DA Form 2407/DA Form 5990-E, Maintenance Work

Order, in accordance with DA Pamphlet 738-750 and submitted to DOL Maintenance Division.

b. The following outlines the DS/GS repair responsibilities with regard to the various target-lifting mechanisms used on Fort Benning firing ranges. The DA form 2407/DA Form 5990-E and the target or components are brought to Building 3716 and given to the Production Controller except for jobs requiring onsite repair. For additional information call 544-8635.

(1) M31A1 target lifting mechanism, M64 Remote Target System (RETS) and the CaswellAA8 Portable Infantry Target System (PITS). The Maintenance Division, DOL, repairs any inoperative mechanisms the using activity/unit brings to the maintenance shop.

(2) Action Targets pneumatic Field Infantry Target System (FITS). There is really no intermediate level maintenance or repair on these mechanisms. However, DS support is available to assist in system repair.

(3) Caswell AA25 – Tank Target Mechanism, anything inside the mechanism or inside the electronics box that is inoperative is DS/GS responsibility to repair. The AA25 needs to be taken to the maintenance shop.

(4) Caswell DP62 Antitank Moving Target System (AMTS) only on Carmouche Range. These target-lifting mechanisms ride on wheels on a fixed track. Maintenance Division repairs any inoperative mechanisms the using activity identifies to the DOL maintenance shop. Request on site repair.

(5) ABA TM-20B tank-sized target lifting mechanism can be found on Ruth and Hastings Ranges. These target lifting mechanisms ride on a cart on a monorail. Maintenance Division repairs any inoperative mechanisms the using activity brings to the maintenance shop. Repairs are made on-site for items too large to bring to shop.

c. Range mowing and grounds keeping equipment from authorized units requiring maintenance and service will now be turned into Maintenance Division, DOL, building 2962, located within the Maintenance Division compound on Upton Avenue.

(1) Turn-in during normal work hours Monday – Friday. A completed DA Form 2407/DA Form 5990-E, Work Order Request, with the NSN or part number and serial number annotated, will be submitted for each piece of equipment. If the NSN is unknown, contact the Hand receipt holder, as the NSN will be annotated on the Hand Receipt. If the NSN is not annotated on the 2407, the equipment will not be accepted.

(2) All equipment must be clean and free of external dirt, gasoline and oil prior to submission for repair. If it is not clean, it will not be accepted.

(3) Customers will be notified when equipment is ready for pick-up. Normal repairs will take an average of 3 weeks to be completed.

(4) DOL will replace items of equipment when the DOL Maintenance Division determines that the equipment is not economically repairable. Units must have equipment registered by model and serial number in the DOL database.

(5) For additional information on any of the above requirements contact the Planning, Production & Control Section (PP&C) at 545-6151/1310.

(6) POL products such as fuel, oil and 2-cycle oil can be obtained from either the Main Post or Sand Hill Motor Pool at no cost to the unit. Individuals drawing POL should go to the POL attendant and identify their unit and their name. For additional information on POL products contact Transportation Division TMP Support Branch, 545-5440.

(7) All personnel who are authorized to turn-in and receive equipment for maintenance, receive new equipment and draw POL should have a signature card (DA Form 1687) on file at both the DOL Maintenance Division and Transportation Division.

B-5. Range Control, DPTM.

a. Perform organizational maintenance of targetry on automated rifle marksmanship, Machinegun and BFV/Tank ranges.

b. Perform maintenance on automated ranges, interior of protective coffins/emplacements.

c. Program target scenarios to support unit requirements.

d. Change targets on the mechanism, replace inoperative mechanisms on the range, replace inoperative hit sensors, replace target arms, cleans exterior surfaces as required and other ancillary components at the conclusion of training. On the Caswell AA25-Tank Target Mechanism Range Control personnel may open the mechanism to reset the breaker and may open the electronics box to program and address the transceiver.

e. Notify units of the need to order replacement BFV/Tank gunnery targets, and notify units when these targets are ready for pick-up.

f. Coordinate requests for DS maintenance by sponsorship units.

g. Review, prioritize, and track DA Form 4283, Facilities Engineering Work Request forms, forward those requests favorably considered

with any required FB144 to the DFEL Work Reception Office. Return those requests not favorably considered without action to submitting units. The statutory requirement for the FB144 exists to ensure that all environmental considerations are satisfied before work begins, and that appropriate funding is available.

h. Maintain a Range Maintenance Priority List, and integrate appropriate requirements into the Installation OMA Project Review Board or other appropriate process.

i. Chair Semi-Annual Range Maintenance Priority meetings with MSC S-3's, and the Annual Review of the Range Maintenance Priority List with the DPTM and MSC Commanders or their representatives.

j. Maintain the integrity of the Range Maintenance Priority List.

k. Facilitate available year-end funding to complete projects on the Range Maintenance Priority List.

l. Remove projects from the Range Maintenance Priority list that are completed through other sources.

m. Range Control Environmental, Safety and Service Patrols will inspect Ranges, Training Facilities and Training Apparatus periodically to ensure high standards of safety, housekeeping, and maintenance are being sustained, and to assist sponsorship units in that endeavor.

n. Range Control Supply is responsible to the procurement, storage, and issue of standard supplies used in range operations, and other equipment necessary for the safe and efficient operation of ranges. These include:

- (1) Targets, target cloth, paste, and pasters.
- (2) Target mechanism kill switches.
- (3) Posters, spotters and marking disks.
- (4) Red range safety flags.
- (5) Hard targets (tanks, heavy vehicles, and so Forth,) for heavy weapons.
- (6) Standard targets and spare parts for RETS ranges (including printer paper).

Appendix C Medical Aid Bag Contents

C-1. Medical aid bags for medical personnel will contain items listed in table C-1

C-2. While serving as a medic supporting activities in the training complex, the medical aid bags for Combat Lifesaver and other first aid qualified medical personnel will contain the items in table C-2.

Table C-1. Items required in Medical Personnel Aid Bags

ITEM	QTY O/H	ITEM	QTY O/H
Alcohol Pads	25 each	Ammonia Inhalants	1 box
Bacitracin	1 tube	Motrin	20 each
Silvadene	1 tube	Sudafed	1 bottle
1" tape	1 roll	½" tape	1 roll
Band-Aids	4 pkgs	Catheter 18GA	6 each
Catheter 20GA	6 each	Gloves	2 pkgs
Insect Sting Kit	1 each	J-Tubes	3 each
Scissors	1 pair	Foot Powder	6 each
Hydrogen Peroxide	1 bottle	Insect Repellent	4 bottles
Scrub Brush	3 each	3" Ace Wrap	2 each
4" Ace Wrap	2 each	6" Ace Wrap	2 each
Gauze Pads	1 pkg	4x4	1 pkg
Abdominal Dressing	3 each	Balsawood Splints	4 each
Casualty Blanket	1 each	C-Collar	1 each
Chux	1 pkg	Cravats	8 each
Cups	1 pkg	Field Dressings	8 each
IV Tubing	6 each	Kerlix	2 each
Moleskin	1 roll	Ringer's Lactate	3 each
Sam Splints	2 each	Sodium Chloride	3 each
Stethoscope	1 each	Tourniquet	2 each

Table C-2. Items required in Combat Lifesaver and other first aid qualified Medical Personnel Aid Bags

ITEM	QTY O/H	ITEM	QTY O/H
Acetaminophen	2 bottles	1" tape	1 roll
J-Tube, large	1 each	J-Tube, small	1 each
2" Ace Bandage	1 roll	Bandage, Muslin Triangular	4 each
Medical Instrument Case	1 each	Catheter 18GA Field Litter	2 each 1 each
Diazepam Injection	5 each	Field Dressing	6 each
Gloves Scissors	3 pair 1 each	IV Injection Set (10 drops/ml)	2 each
Povidone-Iodine Pads	12 each	Pseudoephedrine Hydrochloride	1 box
Povidone-Iodine Ointment	8 tubes	Sam Splint Redcross Armband	1 each 1 each
Ringer's Lactate	2 each	Litter Straps	2 each
Tourniquet	1 each	Band-Aid	18 each

Appendix D Lost Soldier Procedures

D-1. General. The requirements herein are to accommodate land navigation training with the Deployable System for Training (DSTAR) and to establish a lost Soldier policy. All units conducting land navigation training at the Ranger Training Brigade (RTB) and Fuhrman Road/Yankee North & South land navigation courses will utilize the DSTAR system. Intent is to use the DSTAR system as a risk reduction measure during the conduct of land navigation training. It is essential that actions be completed in a timely manner in order to ensure adequate reaction time for support agencies. Although the DSTAR system greatly assists in accountability of personnel conducting land navigation training, the using unit retains responsibility for accountability and recovery of missing Soldiers during land navigation training. The DSTAR system consists of the MILES 2000 harnesses with GPS which will be worn by each Soldier undergoing land navigation training, towers positioned to provide instrumentation coverage, and the PC RIS computers which actually "track" individual Soldier locations. The PC RIS computers are currently located in the DSTAR trailer in the RTB parking lot. Ft Benning currently has instrumented coverage of both Fuhrman Road/Yankee North and South and the RTB Land Navigation courses.

D-2. DSTAR responsibilities.

- a. G3. G3 TD is responsible for resolving conflicts between requests for the DSTAR system. Priority for use of the system are as follows:
 - 1—IOBC.
 - 2—OCS.
 - 3—RTB.
 - 4—BNCOC.
 - 5—ANCOC.
 - 6—Tenant Units.

NOTE: Requests for use of the system will be processed IAW current TASC MILES issue and turn-in policies.

b. Commander, 29th Infantry Regiment. Commander, 29th Infantry Regiment is the USAIC proponent for all land navigation training conducted at Ft Benning. In this capacity, the 29th Infantry Regiment will exercise oversight of the DSTAR program. 29th Infantry Regiment will conduct a train the trainer certification program for using units and ensure G3 Range Control has updated DSTAR certification rosters. They will act as the liaison between using unit, TASC MILES warehouse and DSTAR staff. They will monitor system and assist DSTAR operator during use. They will provide reports to the G3 on the effectiveness of the system to include recommendations for improvements. The DSTAR staff will control access to the DSTAR trailer.

c. Tenant units. Ranger Training Brigade (RTB), 11th Infantry Regiment, 3d Bde 3ID, 36th Engineer Group and other tenant units will be responsible for requisition, accepting accountability and turn-in of MILES 2000 harnesses with embedded GPS from TASC's MILES Warehouse. Prior to use of the DSTAR system, unit Land Navigation NCOIC/OIC personnel must successfully complete a one-hour POI on the DSTAR system, which will be conducted by the 29th Regiment. Using units will provide the 29th Land Navigation Committee with an accurate listing of all Soldiers and the transmitter ID number for the MILES 2000 harness the Soldier will be wearing during land navigation training IAW timeline addressed in paragraph D-3.

D-3. Procedures for DSTAR use.

a. General. Procedures for use of the DSTAR system will mirror the general procedures for opening and closing a range or firing point. For example, using units must request permission from Range Control via hand held radio to open and close a land navigation course.

b. DSTAR Land Navigation execution sequence.

(1) NLT 24 hours prior to STARTEX, using unit draws MILES 2000 harnesses from TASC MILES Warehouse.

(2) NLT 18 hours prior to STARTEX, using unit (with the exception of the RTB) provides list of transmitter IDs for each Soldier to 29th Infantry Land Navigation Committee. The RTB will prepare their own list and provide directly to the DSTAR staff.

(3) NLT 12 hours prior to STARTEX, 29th Infantry (or RTB for Ranger School land navigation training) will provide the transmitter ID/student list to the DSTAR operator and assist in scenario construction.

(4) NLT 2 hours prior to STARTEX, using unit OIC/NCOIC and Soldiers executing the training arrive at start points for Fuhrman Road/Yankee North & South or RTB Land Navigation Course for final preparations. At this time, an NCO or officer (with functioning hand held communications) from the using unit will link up with the DSTAR operator in the DSTAR trailer located at the RTB parking lot. At this point, MILES 2000 harnesses will be activated, and DSTARS tracking will be verified. Using units will conduct a functional inspection of each MILES 2000 harness.

(5) Actions during execution of training. Using unit NCO or officer positioned in the DSTAR trailer will provide updates to the OIC/NCOIC located at the start/finish point throughout the conduct of the training event and annotate non-functioning transmitter numbers. These numbers will be provided to the MILES Warehouse upon turn-in of equipment. L-Hour procedures will be conducted IAW existing Ft Benning directives, regulations and policy letters.

(6) Using unit must return MILES 2000 harness to the TASC MILES warehouse within 24 hours of ENDEX, or IAW guidance received from the MILES Warehouse at time or receipt of equipment.

D-4. Logistics supporting the DSTAR system. Existing MILES Warehouse standards for accountability, serviceability and cleanliness at turn-in will apply to MILES 2000 harnesses with the exception of the following:

a. Using units will provide a list, by transmitter ID number, of defective equipment to include identified fault, to Miles Warehouse at time of equipment turn-in.

b. MILES 2000 batteries are an accountable item and must be turned in to the MILES Warehouse as part of the overall equipment turn-in. G3 TASC MILES Warehouse will determine whether or not any MILES 2000 harness damage is a result of fair wear and tear. Using units will initiate Reports of Survey on damaged equipment when TASC determines that equipment damage was outside this standard.

D-5 Lost Soldier policy.

a. Purpose. To establish policy on the actions to be taken in the event of a Soldier becoming lost during training.

b. Accountability of Soldiers is a primary task of all instructors and leaders and the responsibility of the chain of command. Maintaining accurate accountability and control of Soldiers will minimize the possibility of lost Soldiers. Land navigation exercises, individual and team movements and night tactical training are examples of training with increased risk of lost Soldiers. For this reason, all instructors must be familiar with Fort Benning lost Soldier procedures. Units are encouraged to supplement these procedures to account for mission unique requirements. Range Control, DPTM/G3, 545-3446/4619, is the proponent for the Ft Benning Lost Soldier Policy.

c. Lost Soldier Procedures will be included in the Risk Management Worksheet and the safety checklist for all training at risk of a 'Lost Soldier'.

d. Implementation:

(1) Units will develop a basic search plan with an increased risk of 'Lost Soldiers.' These plans will be developed prior to initiating training and will include the following:

(a) Boundaries of the exercise area.

(b) A signal plan.

(c) Accountability procedures.

(d) A search plan sketch.

(e) A decision timeline.

(2) Installation support to a lost Soldier incident is intended to supplement the unit's immediate efforts to recover a lost Soldier and provide positive control to that support.

(a) The Range Control Operations Firing Desk (Range Control) will provide coordination and control communication for installation assets committed to recovery of a lost Soldier.

(b) Range Control will be notified immediately upon the discovery that a Soldier is absent from any training event on Fort Benning. In the case of a Soldier absent from a live-fire range, Range Control will place all ranges affecting the range from which the Soldier is absent on check fire. These ranges will remain on check fire until the Soldier is found or directed by the Director of Operations and Training to continue live fire training. For example: a Soldier is missing from Malone 15, the entire Malone Complex is put in a check-fire status until the Soldier is recovered or properly accounted for.

(c) Every exercise will be given an L-hour. L-hour is defined as the designated time that the lost Soldier was scheduled to return from the mission exercise or was determined to be missing by the chain of command. Immediately upon discovering that a Soldier is lost, the Officer or Noncommissioned Officer in charge (OIC/NCOIC) will notify Range Control of the lost Soldier. If the lost Soldier is not found by L+1, Range Control will begin the L-Hour Sequence.

(3) L+1 hour activities. Range Control will notify:

(a) USAIC Staff Duty Officer, 545-2218. The Installation FOD/SDO will assume Command of Installation Support Coordination and activation through the Firing Desk communications capabilities.

(b) Range Management Officer, 545-4619.

(c) 498th Medical Company (AA), 545-3288.

(d) DPTM Flight Attachment Commander or Operations, 545-8086.

(e) Directorate of Public Safety, 545-5222 (Range Control will alert DPS Military Working Dog team(s) to assist in the search).

(4) L+2 Installation SDO initiates SIR procedures IAW Installation SDO Instructions and dispatches DPS Search Dog Team(s) if not already committed.

(5) L+4 Installation SDO may launch 498th Medical Company (AA) MEDEVAC or DPTM Aviation Assets if they are available.

(6) L+6 all available resources will be committed.

Glossary

Section I Abbreviations

AGL.....	Above ground level
AR	Army Regulation
AAS	Airfield Advisory Service
BFV	Bradley Fighting Vehicle
CCT.....	Combat control team
CFL	Cease fire line
CQBC.....	Close Quarter Battle Course
D-25	25 weeks or more prior to scheduled use of range or training area
D-23	23 weeks prior to scheduled use of range or training area
D-1 day ...	1-day prior to scheduled use of range or training area
D day.....	Day of scheduled use of range or training area
DCA	Director of Community Activity
DOL.....	Directorate of Logistics
DPTM.....	Directorate of Plans, Training, and Mobilization
DPW.....	Directorate of Public Works
DRMO	Defense Reutilization and Marketing
EA	Environmental assessment
EM.....	Environmental Management
FC	Field Circular
FDC.....	Fire direction center
FM.....	Field Manual
GSO	Ground safety observer
GTAC	Ground terminal attack control
ITAM	Integrated Training Area Management
IFR	Instrument flying rules
LRSO	LASER Range Safety Officer
MSL.....	Mean sea level

MOUT.....Military operation on urban terrain
 MSC.....Major Subordinate Command
 NCOA.....Noncommissioned Officers Academy
 OICOfficer in Charge
 PFDR.....Pathfinder
 QASAS....Quality Assurance Specialist (Ammunition Surveillance)
 RSO.....Range Safety Officer
 RCW.....Red Cockaded Woodpecker
 RFMSS...Range Facility Management Support System
 RSO.....Range Safety Officer
 RETS.....Remoted Target Systems
 SBLSoldier Battle Lab
 SFL.....Start fire line
 SDZSurface danger zone
 TA.....Training Area
 VMCVisual meteorological condition

Section II **Terms**

Ammunition

Includes, but is not necessarily limited to:

- All items of ammunition.
- Chemical propellants, liquid and solid.
- Devices.
- Guided missiles.
- High and low explosives.
- Signals and components thereof, including
 - chemical agent fillers and substances associated
 - with presenting real or potential hazards to life and property.
- Warheads.

Camping

Living in temporary shelters, including recreation vehicles and tents.

Chief, Range Control

USAIC staff officer responsible for supervision and enforcement of range safety, coordination and scheduling of range/terrain, and siting of range and training facilities, their maintenance and modification. Also referred to as Range Management Officer (RMO).

Dud

Explosive ammunitions which has been fired, has failed to function as designed, and as a result is of a hazardous or unpredictable condition.

Dud area

Areas known to contain unexploded live ammunition.

ENVIRONMENTAL INCIDENT.

Any adverse impact on the environment.

Field Ammunition Supply Point (Field ASP)

Any temporary location outside of permanently established and licensed ammunition storage areas that is used to store/hold ammunition for 24 hours or longer. The ammunition can be positioned on dunnage on the ground, left on vehicles, or stored inside containers.

Firing/impact area

Primary danger areas created by firing live ammunition.

LASER Range Safety Officer/LASER Range Safety Noncommissioned Officer (LRSO/LRNCO)

Designated officer, warrant officer or noncommissioned officer of the firing unit who is responsible for controlled by a CCT or qualified pathfinder

Malfunction

Failure of an ammunition item to function as expected when fired or launched.

Misfire

Failure of primer or the propelling charge of a round to function wholly, or in part.

Officer in Charge (OIC)

Officer in charge of troops conducting live fire training on or using range facilities and having responsibility for the operation of the range.

Range

Any area on the installation designated or habitually used for firing of weapons, weapon training, or use of demolitions.

Range Control

That section of Range Control which operates the radio nets for opening/closing ranges, training facilities and training areas; provides a point of contact for requesting assistance; operates a flight advisory service for aircraft flying in the installation restricted air space; broadcasts weather, fire and heat danger information.

Range Safety Officer (RSO)

A qualified commissioned officer or warrant officer or noncommissioned officer who is the direct representative of the officer in charge of firing. The RSO is responsible to the OIC for ensuring the adequacy of safety when firing is being conducted and for the final determination that, before firing, settings are placed on indirect fire weapons and that ammunition request data is within the prescribed safety limits. RSO must be knowledgeable of weapons systems involved.

Roadblocks

A permanent or temporary barrier to foot and vehicular traffic beyond which personnel are forbidden to pass without the prior approval of Range Control. A roadblock may be a wire barrier, gate, or a sign.

Road guard

A road guard is person occupying a designated location to restrict access to a given area. Usually road guards are used to stop or redirect vehicular traffic during periods when weapons are firing over or across main roads and the firing would endanger passengers in vehicles traveling those roads. Road guards must establish and maintain radio communication with the OIC of the training in progress for which they are a part.

Specular (mirror like)

A specular surface in which an individual can see his/her undistorted reflection. Examples of specular surfaces are: vehicle windows, vision blocks, searchlight cover glass, sheets of plastic, mirrors, chrome-plated metal, panes of glass, retro-reflective target material. Cloth, cardboard, wood and lusterless metal are not considered specular.

Tactical roadblock

Temporary barriers, road craters, and so forth, used in tactical training. Tactical roadblocks will be constructed in a manner to permit passage of emergency traffic and be removed upon completion of exercise.

Target Systems personnel

Individual charged with the responsibility to install, operate, and maintain target systems equipment.

Training area

A particular portion of the Fort Benning reservation identified by a letter and number in which training activities are conducted. (Range Maps 1:25,000 A, B, or 1:50,000 General Information).

Training exercise

A term used to denote a type of activity on a specific piece of terrain. It includes range firing, demonstrations, and field training exercises, testing of material and other special field activities. It may include live ammunition, blanks, demolitions, pyrotechnics, simulators, and chemical munitions.

Training facility

A location assigned for specific purposes, such as, Slide for Life, River Crossing, and MOUT.

Troop limits

That portion of a range or exercise area beyond which personnel and vehicles may not proceed except upon specific authorization by Range Control.

RANGE SAFETY OPERATION CHECKLIST

For Use of this form, see USAIC Regulation 210-4; the proponent agency is Range Control, DPTM.

RANGE:	UNIT:	DATE:
OFFICER IN CHARGE:		
BEFORE USE: The OIC must assure that each applicable item is present or in effect before allowing firing to commence. If the status of any item is unknown, firing must be delayed until corrective action is taken.	OK	NA
Appointed OIC and RSO have attended the Range Safety Briefing and possess FB Form (RCO) 3, attesting attendance. (Para 2-5n, 2-10 and table 2-3)		
Range is scheduled for use on date(s) of use (USAIC weekly Range and Terrain Schedule or other authenticated document). (Para 2-8 & table 2-3)		
Firing to be conducted is included in a firing data document prescribing weapons, ammunition, limits, controls, etc., for the particular range (FB Form 210-4-3-R, approved LOI or other authenticated correspondence, with risk assessment made a part thereof. (Para 2-8 and table 2-3)		
Support documents on hand.		
Firing data authorization (FB Form 210-4-3-R)		
Range SOP		
Range and Terrain Regulation (USAIC Regulation 210-4)		
Current FM, TM, etc. (Para 2-8 and table 2-3)		
OIC and NCOIC are familiar with CPR, four basis life-saving steps and MEDEVAC procedures. (USAIC Regulation 40-2)		
Instructions/location/phone/radio frequencies needed for MEDEVAC prominently posted on the range. (Para 2-8)		
Roadblocks emplaced, road guards positioned (with radio commo). (Para 2-8)		
Safety Briefing has been presented to all personnel involved in the range activity, including but not limited to: (para 2-8)		
Range commands		
Limits of fire		
Cease fire signals		
Ammo controls		
Troop limits		
Hearing Protection		
Vehicle flags systems		
Forest fires		
Helmet requirements		
Disposition of explosives		
Weapon clearance		
MEDEVAC procedures		
Risk Assessment briefed to all personnel and Daily Risk Assessment completed		
Range flag/light displayed. (Para 2-8)		
Personnel instructing in demolition/explosives have attended the Demolition Permit Course and possess a Demolition Permit Card. (Para 2-8)		
First Aid Kit, General Purpose, present on the range. (Para 2-8)		
Hearing protection devices afforded to all personnel. (Para 2-8)		
Communication established with Range Control and an "opening code" obtained. (Para 2-8)		
DURING USE: The OIC must assure that all applicable items remain present or in effect. At any time when an applicable items cease to be present or in effect, firing must cease.		
Range flag/light is displayed at all times. (Para 2-8)		
Radio communication maintained with Range Control at all times range is occupied. (Para 2-8)		
Body Armor used for Fire and Movement Training. (Para 2-8)		

RANGE SAFETY OPERATION CHECKLIST <i>For Use of this form, see USAIC Regulation 210-4; the proponent agency is Range Control, DPTM.</i>		
	OK	NA
Helmets are worn when engaged in demolition of explosives, training with live hand grenades, mortars & others, as directed. (Para 2-8)		
Misfires are handled IAW appropriate FM and USAIC Regulation 210-4. (Para 2-8)		
Smoking not permitted within 60 feet of ammunition. (USAIC Regulation 710-3)		
Ammunition not exposed to direct sunlight or rain for extended periods of time. (USAIC Regulation 710-3)		
Only ammunition specifically cleared for overhead fire is used overhead. (Para 2-8, 2-9, and 5-20)		
The use of nonstandard ammunition is prohibited. (Para 2-8 and 2-9)		
Record all duds (unexploded ordnance) fired into nonpermanent dud areas. (Para 2-8 and 2-9)		
UPON COMPLETION OF FIRING: Required actions to close out training on the range and prepare for clearance with unit assigned range.		
All weapons are cleared. (Para 2-8)		
Obtain closing code from Range Control. (Para 2-8)		
All explosives, booby traps, simulators, pyrotechnics have been removed. (Para 2-8)		
Unused propellant increments/charges have been disposed of IAW appropriate FM. (Para 2-8 and 5-9)		
Submit Demolition Reconnaissance Report to Range Control. (Para 5-4)		
Search for and mark all duds, request assistance from EOD, report clearance to Range Control. (Para 5-8)		
Roadblocks and guards are removed. (Para 2-8)		
Foxholes, trenches, emplacements, sumps, etc. are filled. (Para 2-8)		
Barbed/razor wire is removed from site. (Para 2-8)		
Hand grenade impact areas are leveled, all holes filled. (Para 2-8)		
RANGE CLEARANCE: When clearing with unit assigned the range, range must be restored to operational condition. Other appropriate requirements may be specified by the assigned unit. (Para 2-6)		
BUILDING POLICED. (Para 2-8)		
Personnel/storage building		
Latrines		
Ammo issue points		
Control towers		
Problem areas reported to unit assigned ranges. (Para 2-8)		
PREVENTION OF HEAT INJURIES: This portion pertains to all types of training being conducted from 1 May through 30 September or at any time during the remainder of the year that the ambient temperature exceeds 85 degrees Fahrenheit for two or more days in succession.		
Are written procedures on hand for the prevention of heat injuries? (USAIC Regulation 40-16, para 3b(1))		
Has unit established communications with Range Radio Control? (USAIC 210-4, para 7-1)		
Does unit have on hand a WBGT kit or bots ball to monitor heat category levels when category is 1 or higher or has access to heat category reporting? (USAIC Regulation 40-16, para 3b(5) and 3c(7))		
Does unit have ample quantities of water readily accessible for troop consumption? (USAIC Regulation 40-16, para 3c(1))		
Does OIC/NCOIC have in their possession FB Form 7 (Heat Injury Prevention)? (Para 3c(6))		
Are heat injury prone personnel identified with a piece of red tape on individual's earplug case? (USAIC Regulation 40-16, para 3c(8))		
Has unit implemented the appropriate work/rest cycles during strenuous physical activities? (USAIC Regulation 40-16, App B)		
Does unit risk management worksheet indicate measures for prevention of heat injuries? (USAIC Risk Management SOP, Dated 4 Feb 97)		

REVERSE OF FB FORM 210-4-1-R, JAN 03 REPLACES FB FORM 51-R, FEB 98

ARTILLERY/MORTAR SAFETY RECORD

For use of this form, see USAIC Regulation 210-4; the proponent is DPTM, Range Control.

DATE:							
FIRING POINT #:				WEAPONS:			
COORDINATES:				ELEV:		FUSE:	
Weapon Projectile	Left Limit Mils	Right Limit Mils	Minimum Range Meters	Maximum Range Meters	Minimum Charge	Maximum Charge	Maximum Ordnance Meter or feet
SPECIAL INSTRUCTIONS: a. This FB Form 210-4-2-R must accompany the corresponding FB Form 210-4-3-R. b.							
Name/rank/signature of requesting officer				Approved by:			

FIRING/NONFIRING DATA <i>For use of this form see USAIC Regulation 210-4; the proponent agency is DPTM</i>				
TO: Chief, Range Control, Directorate of Plans, Training, & Mobilization Fort Benning, GA 31905			DATE:	
THRU:			FROM:	
SECTION I				
Problem Number:		Range:		Title:
Type Training: a. Live Fire b. Non-live Fire			CP/Controller Coordinates:	
SECTION II, DEMOLITIONS/GRENADES/MINES/PYROTECHNICS				
Coordinates	Type	Model/DODAC	Size of Charges	
SECTION III, WEAPONS/AMMUNITION REQUESTED				
Coordinates of Weapons Position	Type Weapon/Model Number	Type Ammunition	Left Limit	Right Limit
SECTION IV, LIVE FIRE EXERCISES Attach the following:		SECTION V, NON-LIVE FIRE TRAINING		
a. Scenario of training to be conducted:		a. Training area(s) to be occupied:		
b. Sketch of area.		b. Scenario of training to be conducted:		
c. Risk Assessment:		c. Sketch of area(s) to be occupied:		
d. Attach FB Form 210-4-2-R if Mortar or artillery is being fired:		d. Risk Assessment		
Name/rank/signature of requesting officer:		Name/rank/signature of Major Unit S3/Commander:		
SECTION VI, FOR RANGE CONTROL USE				
TO:		FROM: Range Control, Directorate of Operations & Training Fort Benning, GA 31905		DATE:
a. Roadblocks to be closed:				
b. Road(s) to be closed/road barrier locations:				
c. This approval expires:				
d. REMARKS:				
Chief, Range Control Directorate of Operations and Training			Signature:	

FB FORM 210-4-3-R, JAN 03

REPLACES FB FORM 465-R, FEB 98

ENVIRONMENTAL CHECKLIST, For use of this form, see USAIC Regulation 210-4; the proponent agency is Range Control, DPTM					
COMPARTMENT:		UNIT:		DATE:	
OFFICER IN CHARGE:					
RED-COCKADED WOODPECKER				YES	NO
WITHIN 200 FOOT BUFFER ZONE:					
-Troops within buffer for more than 2 hours					
-Digging within buffer, other than hasty fighting positions					
-Offroad traffic within 50 feet of a cavity tree					
-Cutting pines for camouflage					
-Vehicle maintenance for more than 2 hours					
-Establishment of defensive positions/Assembly area operations					
-Establishment of CS/CSS sites					
-Artillery or MLRS firing position set up					
-Use of noise generators					
-Use of Smoke, Haze operations, generators or pots (source must be outside boundary)					
-Use of trip flares or other incendiary device					
-Use of CS/Riot gas or HC smoke of any type					
-RCW trees scarred/felled					
WITHIN 200 FOOT BUFFER ZONE:					
-Troops within buffer for more than 2 hours					
-Digging within buffer, other than hasty fighting positions					
-Offroad traffic within 50 feet of a cavity tree					
WITHIN 1/2-MILE OF CLUSTER:					
-Mechanical digging within 20 feet of a mature pine tree (8 in. diameter or greater)					
OTHER CONCERNS:					
-Pinestraw raking					
-Digging or vehicle movements in Sensitive Area					
-POL spill					
ACTION TAKEN:					

FOR THE COMMANDER:

CHARLES D. CORNWELL
Colonel, Infantry
Chief of Staff

OFFICIAL:



PAUL YATES
Director of Information Management

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